

STIC Search Report

SINGPRESE

TO: Kriellion Sanders Location: REM 10D31

Art Unit : 1714 February 27, 2006

Case Serial Number: 10/073780

From: Usha Shrestha Location: EIC 1700

REMSEN 4B28

Phone: 571/272-3519

usha.shrestha@uspto.gov

Section Notes



Requester's Full Name: Kriell Art Unit: 1714 Phone Mail Box and Bldg/Room Location	ion Sande Number 30 211 n: Rem 1 v 10 31	Exam ZZ S Results For	iner # : <u>609</u> erial Numbe mat Preferre	Date:	z/zz/o6 80 R DISK E-MAIL
If more than one search is subr	nittad nlassa n	rioritize sear	ches in ord	er of need.	
Please provide a detailed statement of the Include the elected species or structures, utility of the invention. Define any term known. Please attach a copy of the cover	e search topic, and d keywords, synonyn s that may have a sp	describe as specif ns, acronyms, and pecial meaning.	ically as possil d registry num Give examples	ble the subject matt bers, and combine	er to be searched. with the concept or
Title of Invention: Bloom	Resistant S	Benzotina a	cole UV	absorbes	and congosit
Inventors (please provide full names):	wood et a	.d			
Earliest Priority Filing Date:	2/1/2000				
*For Sequence Searches Only * Please incl	lude all pertinent info	rmation (parent, c			
Picuse Seas	ch for	hen zoton	rzdes.	of tillack	red claus
Please No	ti the	provise e	on Page	6	
			\$(CIENTIFIC REFE Sci 👂 Lech Int	· Chr
				FEB 23	RECD
				Pat. & T.M. O	ffice
*********	*****	*****	*****	*****	****
STAFF USE ONLY	Type of Sear			and cost where ap	oplicable
Searcher: 600	NA Sequence (#)				
Searcher Phone #:	AA Sequence (#)) Dial	og		

In the Claims

1-29. (canceled)

30. (currently amended) A compound of formula I, II or III

$$G_1$$
 N
 N
 N
 E_1
 E_2
 (I)

$$\begin{array}{c|c}
 & OH \\
 & N \\
 & E_2
\end{array}$$
(II)

$$G_1$$
 N
 N
 N
 G_2
 G_2
 G_3
 G_4
 G_2
 G_3
 G_4
 G_2
 G_3
 G_4
 G_5
 G_7
 G_8
 G_9
 G_9

wherein

G₁ and G₁' are independently hydrogen or halogen,

G₂ and G₂' are independently hydrogen, halogen, nitro, cyano, E₃SO-, E₃SO₂-, -COOG₃, perfluoroalkyl of 1 to 12 carbon atoms, $-P(O)(C_6H_5)_2$, $-CO-G_3$, $-CO-NH-G_3$, $-CO-N(G_3)_2$, $-N(G_3)-CO-G_3$,

G₃ is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight of branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms; or G₃ is T₁ or T₂,

E₁ is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 24 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms; or E₁ is alkyl of 1 to 24 carbon atoms substituted by one or two hydroxy groups; or E_1 is the group - $(CH_2)_m$ -CO-X- T_1 where m is 0, 1 or 2; or E_1 is the group - $(CH_2)_p$ -X-CO- T_2 where p is 1, 2 or 3,

E2 and E2' are independently straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by one to three alkyl of 1 to 4 carbon atoms; or E2 and E2 are independently said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more -OH, -OCOE₁₁, -OE₄, -NH₂, -NHCOE₁₁, -NHE₄ or -N(E₄)₂, or mixtures thereof, where E₄ is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more -O-, -NH- or -NE₄- groups or mixtures thereof and which can be unsubstituted or substituted by one or more -OH, -OE4 or -NH2 groups or mixtures thereof; or E₂ and E₂ are independently -(CH₂)_m-CO-X-T₁ or -(CH₂)_p-X-CO-T₂, or E_4 is T_1 or T_2 ,

-4-

X is -O- or -N(E_{16})-,

 E_{18} is hydrogen, C_1 - C_{12} -alkyl, C_3 - C_{12} -alkyl interrupted by 1 to 3 oxygen atoms, or is cyclohexyl or C_7 - C_{15} aralkyl,

E₁₁ is a straight or branched chain C₁-C₁₈alkyl, C₅-C₁₂cycloalkyl, straight or branched chain C₂-C₁₈alkenyl, C₆-C₁₄aryl or C₇-C₁₅aralkyl; or E₁₁ is T₁ or T₂,

E₃ is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, alkenyl of 3 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, aryl of 6 to 10 carbon atoms or said aryl substituted by one or two alkyl of 1 to 4 carbon atoms or 1,1,2,2-tetrahydroperfluoroalkyl where the perfluoroalkyl moiety is of 6 to 16 carbon atoms,

L is alkylene of 1 to 12 carbon atoms, alkylidene of 2 to 12 carbon atoms, benzylidene, p-xylylene, $\alpha,\alpha,\alpha',\alpha'$ -tetramethyl-m-xylylene or cycloalkylidene, and

T is -SO-, -SO₂-, -SO-E-SO-, -SO₂-E-SO₂-, -CO-, -CO-CH₂-CO-, -CO-E-CO-, -COO-E-OCO- or -CO-NG₅-E-NG₅-CO-.

where E is alkylene of 2 to 12 carbon atoms, cycloalkylene of 5 to 12 carbon atoms, or alkylene interrupted or terminated by cyclohexylene of 8 to 12 carbon atoms;

G₅ is G₃ or hydrogen,

T₁ is straight or branched chain alkyl of 25 to 100 carbon atoms, or said alkyl substituted by one hydroxyl group and interrupted by one oxa moiety, or a mixture of such alkyl moieties; or

 T_1 is -(R-O)_n-R-OG_x where R is ethylene, propylene, trimethylene, 1,2-butylene or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T_1 is at least 25,

 G_x is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight of branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms, phenyl, or said phenyl or said phenylalkyl substituted on the phenyl ring by 1 to 4 alkyl of 1 to 4 carbon atoms,

T₂ is straight or branched alkyl of 23 to 100 carbon atoms; and

1

with the proviso that at least one of E_1 , E_2 and E_2 ' is a group -(CH₂)_m-CO-X-T₁ or a group -(CH₂)_p-X-CO-T₂ or at least one of G_2 and G_2 ' is a group -COOG₃, -CO-NH-G₃, -CO-NH-G₃, -CO-N(G₃)₂, -N(G₃)-CO-G₃,

$$-N$$
 CO
 G_3
 O
 CO
 CO
 CO
 CO

where G_3 is T_1 or T_2 .

31. (currently amended) A compound according to claim 30 of formula I

$$G_1$$
 N
 N
 E_1
 E_2
 (I)

wherein

G₁ is hydrogen,

 G_2 is hydrogen, chloro, fluoro, cyano, E_3SO_2 -, $-COOG_3$, CF_3 , $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$,

 G_3 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight of branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or G_3 is T_1 or T_2 ,

 E_1 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 24 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E_1 is the group -(CH₂)_m-CO-X-T₁ where m is 0, 1 or 2; or E_1 is the group

-(CH_2)_p-X-CO- T_2 where p is 1, 2 or 3,

 E_2 is straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E_2 is said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more -OH, -OCOE₁₁, -OE₄, -NHCOE₁₁, -NHE₄ or -N(E₄)₂, or mixtures thereof, where E_4 is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more -O-, -NH- or -NE₄- groups or mixtures thereof and which can be unsubstituted or substituted by one or more -OH, -OE₄ or -NH₂ groups or mixtures thereof; or E_4 is T_1 or T_2 ,

X is -O- or -N(E_{16})-,

E₁₆ is hydrogen,

 E_{11} is a straight or branched chain C_1 - C_{18} alkyl, C_5 - C_{12} cycloalkyl, C_6 - C_{14} aryl or C_7 - C_{15} aralkyl; or E_{11} is T_1 or T_2 ,

E₃ is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or aryl of 6 to 10 carbon atoms,

T₁ is straight or branched chain alkyl of 25 to 70 carbon atoms, or said alkyl substituted by one hydroxyl group and interrupted by one oxa moiety, or a mixture of such alkyl moieties; or

 T_1 is -(R-O)_n-R-OH where R is ethylene, propylene, trimethylene or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T_1 is at least 25, and

T₂ is straight or branched alkyl of 23 to 70 carbon atoms; and

with the proviso that at least one of E_1 and E_2 is a group -(CH₂)_m-CO-OT₁or a group -(CH₂)_p-O-CO-T₂, or G_2 is a group -COOG₃, -CO-G₃, -CO-NH-G₃ or -CO-N(G₃)₂ where G_3 is T_1 or T_2 .

32. (previously presented) A compound according to claim 30 of formula III

wherein

G₁ and G₁' are hydrogen,

 G_2 and G_2 ' are independently hydrogen, chloro, fluoro, cyano, E_3SO_2 -, $-COOG_3$, CF_3 , $-CO-G_3$, $-CO-NH-G_3$ or $-CO-N(G_3)_2$,

 G_3 is hydrogen, straight or branched chain alkyl of 1 to 24 carbon atoms, straight of branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or G_3 is T_1 or T_2 ,

E₂ and E₂' are independently straight or branched alkyl chain of 1 to 24 carbon atoms, straight or branched chain alkenyl of 2 to 18 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or phenyl; or E₂ and E₂' are independently said alkyl of 1 to 24 carbon atoms or said alkenyl of 2 to 18 carbon atoms substituted by one or more -OH, -OCOE₁₁, -OE₄, -NHCOE₁₁, -NHE₄ or -N(E₄)₂, or mixtures thereof, where E₄ is straight or branched chain alkyl of 1 to 24 carbon atoms; or said alkyl or said alkenyl interrupted by one or more -O-, -NH- or -NE₄- groups or mixtures thereof and which can be unsubstituted or substituted by one or more -OH, -OE₄ or -NH₂ groups or mixtures thereof; or E₄ is T₁ or T₂,

E₁₈ is hydrogen,

 E_{11} is a straight or branched chain C_1 - C_{18} alkyl, C_5 - C_{12} cycloalkyl, C_6 - C_{14} aryl or C_7 - C_{15} aralkyl; or E_{11} is T_1 or T_2 ,

E₃ is alkyl of 1 to 20 carbon atoms, hydroxyalkyl of 2 to 20 carbon atoms, cycloalkyl of 5 to 12 carbon atoms, phenylalkyl of 7 to 15 carbon atoms or aryl of 6 to 10 carbon atoms,

L is alkylene of 1 to 12 carbon atoms, alkylidene of 2 to 12 carbon atoms, benzylidene, p-xylylene, $\alpha,\alpha,\alpha',\alpha'$ -tetramethyl-m-xylylene or cycloalkylidene,

T₁ is straight or branched chain alkyl of 25 to 70 carbon atoms, or said alkyl substituted by one hydroxyl group and interrupted by one oxa moiety, or a mixture of such alkyl moieties; or

 T_1 is -(R-O)_n-R-OH where R is ethylene, propylene, trimethylene or tetramethylene, and n is 6 to 49 so that the total number of carbon atoms in T_1 is at least 25, and

T₂ is straight or branched alkyl of 23 to 70 carbon atoms; and

with the proviso that at least one of E_2 and E_2 ' is a group -(CH₂)_m-CO-OT₁ or a group -(CH₂)_p-O-CO-T₂, or at least one of G_2 and G_2 ' is a group -COOG₃, -CO-NH-G₃ or -CO-N(G₃)₂ where G_3 is T₁ or T₂.

33. (previously presented) A compound according to claim 30 which is

- (a) C₂₀-C₄₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 35-51°C:
- (b) C₂₀-C₄₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 58-63°C;
- (c) C₂₀-C₄₀alkyl 3-(5-chloro-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 33°C;
- (d) C₂₀-C₄₀alkyl 3-(5-chloro-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 57-67°C;
- (e) C₂₀-C₄₀alkyl 3-(5-trifluoromethyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydro-cinnamate;
- (f) C₂₀-C₄₀alkyl 3-(5-phenylsulfonyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 42°C;

- (g) C₂₀-C₄₀alkyl 3-(5-phenylsulfonyl-2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate melting at 65-74°C; or
 - (h) C₄₀-C₆₀alkyl 3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyhydrocinnamate.

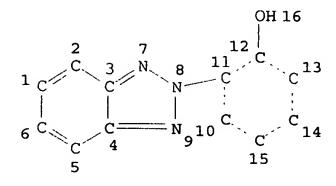
FILE 'REGISTRY' ENTERED AT 11:29:54 ON 27 FEB 2006

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                286471-15-6/BI OR 290-87-9/BI OR 290822-07-0/BI OR
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                STR L3
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L5
L6
                STR L4
L7
                STR
L8
                STR L6
             50 SEA SSS SAM L8
L9
L10
           6056 SEA SSS FUL L8
L11
             26 SEA ABB=ON PLU=ON L10 AND L2
                SAV L10 SAN780/A
L12
             25 SEA SUB=L10 SSS SAM L7
L13
                STR L7
L14
             9 SEA SUB=L10 SSS SAM L13
L15
                STR L13
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              O SEA SUB=L10 SSS SAM L15
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              O SEA SUB=L10 SSS FUL L15
L18
            724 SEA SUB=L10 SSS FUL L7
     FILE 'HCAPLUS' ENTERED AT 10:34:37 ON 27 FEB 2006
L19
            349 SEA ABB=ON PLU=ON L18
L20
            231 SEA ABB=ON
                           PLU=ON L19(L)PREP/RL
L21
            132 SEA ABB=ON
                           PLU=ON
                                   L20 AND (UV? OR ULTRAVIOLET? OR
                ULTRA(A) VIOLET?) (2A) ABSOR?
              O SEA ABB=ON PLU=ON L21 AND BLOOM?
L22
L23
             62 SEA ABB=ON PLU=ON L21 AND COMPOSITION?
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L24
            62 SEA ABB=ON PLU=ON L23 AND P/DT
L25
            45 SEA ABB=ON PLU=ON L24 AND (1907-2000)/PRY, AY
    FILE 'REGISTRY' ENTERED AT 11:01:31 ON 27 FEB 2006
L26
           180 SEA ABB=ON PLU=ON L18 AND 1/NC
    FILE 'HCAPLUS' ENTERED AT 11:03:39 ON 27 FEB 2006
           154 SEA ABB=ON PLU=ON L26
L27
            60 SEA ABB=ON PLU=ON L27 AND COMPOSITION?
L28
L29
            35 SEA ABB=ON PLU=ON L28 AND (PLASTIC? OR POLYMER?)/SC,S
              Χ
L30
            17 SEA ABB=ON PLU=ON L29 NOT L25
L31
            16 SEA ABB=ON PLU=ON L30 AND P/DT
            10 SEA ABB=ON PLU=ON L31 AND (1907-2000)/PRY, AY
L32
L33
           1 SEA ABB=ON PLU=ON L30 NOT L31
L34
           1 SEA ABB=ON PLU=ON L33 NOT (2001-2005)/PY
L35
            56 SEA ABB=ON PLU=ON L25 OR L32 OR L34
               SEL L35 HIT RN 1-56
L36
            1 SEA ABB=ON PLU=ON L19 AND BLOOM?
L37
            O SEA ABB=ON PLU=ON L27 AND BLOOM?
    57 SEA ABB=ON PLU=ON L35 OR L36 OR L37
L38
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=> d que 117 L8



STR

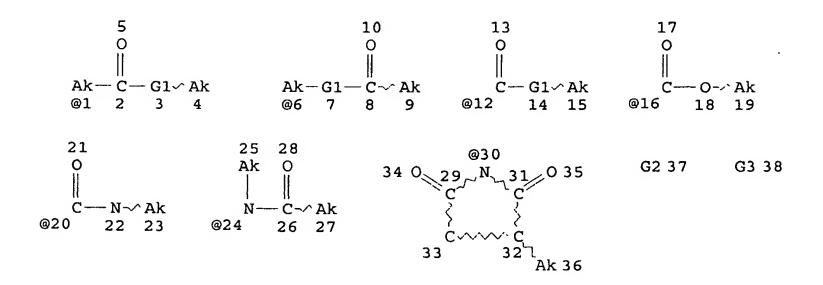
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DEFAULT ECLEVEL IS LIMITED

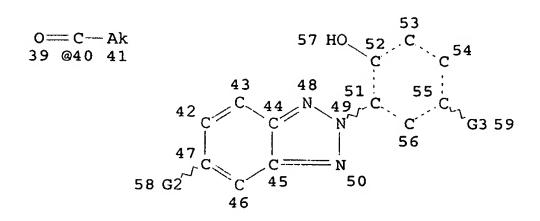
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STEREO ATTRIBUTES: NONE

L10 6056 SEA FILE=REGISTRY SSS FUL L8

L15 STR





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NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

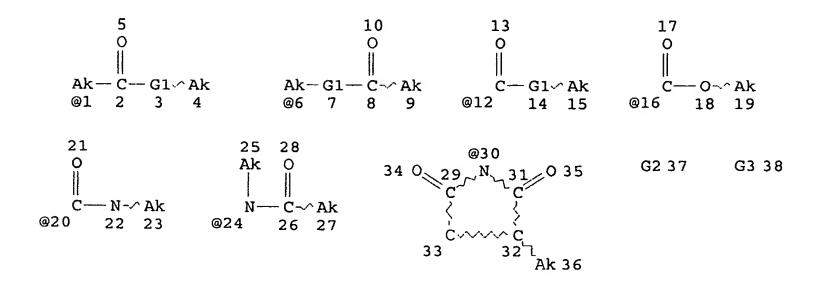
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STEREO ATTRIBUTES: NONE

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=> d que 138 L7 STR



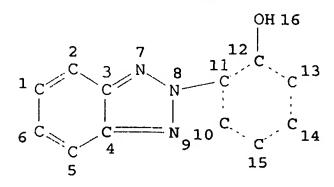
0 = C - Ak 39 @40 41

VAR G1=O/N
VAR G2=1/6/12
VAR G3=16/20/24/30/40
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 40

STEREO ATTRIBUTES: NONE L8 STR



NODE ATTRIBUTES:

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GRAPH ATTRIBUTES:

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STEREO ATTRIBUTES: NONE

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L19	349 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
L20	231 SEA FILE=HCAPLUS ABB=ON PLU=ON L19(L)PREP/RL
L21	132 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (UV? OR

```
ULTRAVIOLET? OR ULTRA(A) VIOLET?) (2A) ABSOR?
L23
             62 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 AND COMPOSITION?
L24
             62 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 AND P/DT
L25
             45 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND (1907-2000)/PR
               Y, AY
L26
            180 SEA FILE=REGISTRY ABB=ON PLU=ON L18 AND 1/NC
L27
           154 SEA FILE=HCAPLUS ABB=ON PLU=ON L26
L28
             60 SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND COMPOSITION?
L29
             35 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (PLASTIC? OR
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L30
             17 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 NOT L25
L31
             16 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 AND P/DT
L32
             10 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND (1907-2000)/PR
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L33
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L36
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L37
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L38
             57 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR L36 OR L37
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=> => fil hcap

FILE 'HCAPLUS' ENTERED AT 11:32:55 ON 27 FEB 2006

=> d l38 1-57 ibib abs hitstr hitind

L38 ANSWER 1 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:538320 HCAPLUS

DOCUMENT NUMBER: 137:95279

TITLE: Acrylic polymer-based one-component coatings

with long pot life and good weather resistance

after curing

INVENTOR (S): Noda, Nobuhisa; Nishida, Toshifumi; Aoyama,

Takahiro

PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002201407	A2	20020719	JP 2000-403100	
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				1228
			<	
PRIORITY APPLN. INFO.:			JP 2000-403100	
				2000
				1228

AB The coatings, useful for packaging materials, construction materials, etc., comprise copolymers of reactive-silyl-bearing monomers 3-90, acidic group-bearing monomers 0.3-4, UVabsorbing monomers 1-80, and comonomers 0-95% and alc.-OH-bearing organic solvents. The acidic group-bearing monomers may contain carboxyl, sulfo, and/or phosphoric acid groups. Thus, 0.3:90:9.7 (%) methacrylic acid-KBM 503 (3-methacryloxypropyltrimethoxysilane)-2-[2'-hydroxy-5'-(methacryloxyethyl)phenyl]-2H-benzotriazole copolymer/diacetone alc. composition showed gelation time ≥4 h and formed a cured coating layer showing good scratch and water resistance and no peeling from a polymer support in an accelerated weathering test.

IT 442518-95-8P

RN

CN

(UV absorber-copolymd. one-pot acrylic coatings with good water, weather, and soiling resistance) 442518-95-8 HCAPLUS

Butanedioic acid, 6-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethoxy]-6-oxohexyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} \text{OH} & \text{OH} \\ \\ \text{N} & \text{O} & \text{CH}_2 \\ \\ \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$CH_2-O-C-CH==CH_2$$

 $|$
 $Et-CH-Bu-n$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 5

CRN 121338-00-9 CMF C12 H20 O5 . x C4 H6 O4

CM 6

CRN 85099-10-1 CMF C12 H20 O5

$$^{\rm H_2C}_{||}$$
 $^{\rm O}_{||}$ $^{\rm O}_{||}$ $^{\rm O}_{||}$ $^{\rm Me-C-C-O-CH_2-CH_2-O-C-(CH_2)_5-OH}$

CM 7

CRN 110-15-6 CMF C4 H6 O4

 $HO_2C-CH_2-CH_2-CO_2H$

IC ICM C09D143-04 ICS C09D133-06; C09D141-00; C09D143-02; C09D157-00; C09D157-10; C09D183-04

CC 42-7 (Coatings, Inks, and Related Products)

acrylic silsesquioxane coating lightproof weather resistance; methacryloxypropylmethoxysilane hydroxymethacryloyloxyethylphenylb enzotriazole methacrylic coating waterproof antisoiling;

UV absorber copolymerized acrylic coating alc thinned

IT Coating materials

(acid- and scratch-resistant, waterproof, transparent,
antisoiling, weather-resistant; UV absorber
-copolymd. one-pot acrylic coatings with good water, weather,

and soiling resistance)

IT Silsesquioxanes

(acrylic; UV absorber-copolymd. one-pot

acrylic coatings with good water, weather, and soiling resistance)

ITCoating materials

> (antisoiling, weather-resistant, waterproof, transparent, acidand scratch-resistant; UV absorber

-copolymd. one-pot acrylic coatings with good water, weather,

and soiling resistance)

IT Coating materials

(one-component, curable; UV absorber

-copolymd. one-pot acrylic coatings with good water, weather, and soiling resistance)

ITCoating materials

(storage-stable; UV absorber-copolymd.

one-pot acrylic coatings with good water, weather, and soiling resistance)

IT Coating materials

> (water- and weather-resistant, antisoiling, transparent, acidand scratch-resistant; UV absorber

-copolymd. one-pot acrylic coatings with good water, weather, and soiling resistance)

121338-00-9P, Placcel FM 1A IT 403737-10-0P 442143-28-4P,

2-[2'-Hydroxy-5'-(methacryloyloxyethyl)phenyl]-2H-benzotriazole-KBM 503-methacrylic acid copolymer 442143-29-5P 442143-30-8P

442143-31-9P 442143-32-0P 442143-33-1P 442518-95-8P

(UV absorber-copolymd. one-pot acrylic

coatings with good water, weather, and soiling resistance)

IT 123-42-2, Diacetone alcohol

(solvents; UV absorber-copolymd. one-pot

acrylic coatings with good water, weather, and soiling

resistance)

L38 ANSWER 2 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:497247 HCAPLUS

DOCUMENT NUMBER: 137:70526

TITLE: Resin composition containing

ultraviolet absorbing resin for ink jet

recording and recorded material Sumida, Katsuhiko; Ikami, Kiyotaka

INVENTOR(S): PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002187344	A2	20020702	JP 2000-385797	
				2000
				1219
			<	
PRIORITY APPLN. INFO.:			JP 2000-385797	
				2000
				1219

AB

```
The resin composition for ink receiving layer comprises at
     least (a) 97-40 weight% inorg. particles, (b) 3-60 weight% binder resin
     containing a UV absorbing resin. The UV
     absorbing resin is emulsified by dispersing into water
     after neutralizing a resin solution obtained by urethane-reacting a
     polyester-polyol with UV absorbing group, a
     polyol compound, and an ionic group-containing compound with an organic
     polyisocyanate in an organic solvent. It forms the ink receiving
     layer with improved gloss, ink absorbency, and light stability.
IT
     413571-09-2P 439808-34-1P, Dimethylolbutanoic
     acid-isophorone diisocyanate-polycaprolactone MBEP ester copolymer
     2-dimethylaminoethanol salt 439808-37-4P, Isophorone
     diisocyanate-polycaprolactone MBEP ester copolymer
     N-methyldiethanolamine salt
        (ink-jet printing sheet containing inorg. particle and resin with
        UV absorbing group)
     413571-09-2 HCAPLUS
RN
CN
     2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
     with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane
     and \alpha,\alpha' - [methylenebis [[5-(2H-benzotriazol-2-yl)-4-
     hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[\omega-
     hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], graft, acetate (salt)
     (9CI) (CA INDEX NAME)
     CM
         1
     CRN 64-19-7
     CMF C2 H4 O2
   0
HO-- C-- CH3
     CM
         2
     CRN 413571-08-1
          (C12 H18 N2 O2 . C8 H15 N O2 . (C6 H10 O2)n (C6 H10 O2)n C29
         H26 N6 O4)x
     CCI PMS
          CM
               3
         CRN 214746-68-6
          CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4
          CCI PMS
```

PAGE 1-A

PAGE 1-B

CM 4

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 5

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{Me}_2 \text{N--} \quad \text{CH}_2 - \quad \text{CH}_2 - \quad \text{O--} \quad \text{C---} \quad \text{Me} \end{array}$$

RN 439808-34-1 HCAPLUS

CN Butanoic acid, bis(hydroxymethyl)-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-

3,1-phenylene]-2,1-ethanediyl]]bis $[\omega$ -hydroxypoly [oxy(1-oxo-1,6-hexanediyl)]], compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

 $Me_2N-CH_2-CH_2-OH$

CM 2

CRN 439808-33-0

CMF (C12 H18 N2 O2 . C6 H12 O4 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4)x

CCI PMS

CM 3

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-B

CM 4

CRN 56743-27-2 CMF C6 H12 O4 CCI IDS

CM 5

CRN 4098-71-9 CMF C12 H18 N2 O2

RN 439808-37-4 HCAPLUS
CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxy-, polymer with
5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane,
compd. with 2,2'-(methylimino)bis[ethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 105-59-9 CMF C5 H13 N O2

$$\begin{array}{c} & \text{Me} \\ | \\ \text{HO-} \ \text{CH}_2\text{--} \ \text{CH}_2\text{--} \ \text{CH}_2\text{--} \ \text{OH} \end{array}$$

CM 2

CRN 439808-36-3

CMF (C12 H18 N2 O2 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4)x CCI PMS

CM 3

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A

PAGE 1-B

CM 4

CRN 4098-71-9 CMF C12 H18 N2 O2

IT 214746-68-6P

(preparation and polymerization with diisocyanate)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IC ICM B41M005-00

ICS B41J002-01; C08G018-42; C08G018-66; C08K003-00; C08L075-06; C08L101-10; C09D005-02; C09D005-32; C09D175-04

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ink jet printing sheet **UV absorbing** resin; inorg particle ink jet printing sheet; polyurethane polyester **UV absorbing** resin

IT Polyurethanes, preparation

(acrylic-polyester-, graft; ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

IT Polyesters, preparation

(acrylic-polyurethane-, graft; ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

IT Ink-jet recording sheets

(ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

IT Polyurethanes, preparation

(polyester-, block; ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

IT 7631-86-9, Silica, uses

(colloidal, ST 20; ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

275373-90-5P, Butyl acrylate-2-diethylaminoethyl methacrylate-3-methacryloxypropyl trimethoxysilane copolymer 413571-09-2P 439808-34-1P, Dimethylolbutanoic acid-isophorone diisocyanate-polycaprolactone MBEP ester copolymer 2-dimethylaminoethanol salt 439808-37-4P, Isophorone diisocyanate-polycaprolactone MBEP ester copolymer

N-methyldiethanolamine salt

(ink-jet printing sheet containing inorg. particle and resin with UV absorbing group)

IT 65339-94-8, Neorez R 960 413614-44-5, F 8559D

(ink-jet printing sheet containing inorg. particle and resin with **UV absorbing** group)

IT 214746-68-6P 215232-60-3P

(preparation and polymerization with diisocyanate)

L38 ANSWER 3 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:464236 HCAPLUS

DOCUMENT NUMBER:

137:34029

TITLE:

Light-resistant polycarbonate

compositions containing UV

absorbers with good compatibility and

their shaped articles

INVENTOR(S):

Yamamoto, Ryuichi; Sugimori, Seiji

PATENT ASSIGNEE(S):

Ipposha Oil Industries Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002173590	A2	20020621	JP 2000-370099	
				2000
				1205
			<	
PRIORITY APPLN. INFO.:			JP 2000-370099	
				2000
				1205

<---

OTHER SOURCE(S):

GI

MARPAT 137:34029

N OH OH

The compns. contain polycarbonates and 2,2-methylenebis(6-benzotriazolephenols) I (X, Y = OCOR1, ONHCOR2, OH; X = Y ≠ OH; R1, R2 = C6-26 alkyl, C6-26 alkenyl). Thus, 0.5 mol 2,2'-methylenebis(4-hydroxyethyl-6-benzotriazolephenol) (MBHB) was esterified with 1.2 mol stearic acid in PhMe in the presence of Na p-toluenesulfonate to give MBHB stearate ester in

I

93% yield. Iupilon E 2000F (polycarbonate) (100 parts) was pelletized with 3 parts MBHB stearate ester and injection-molded to give test pieces showing haze 1.1, b value after 4000-h irradiation in a Xe fadeometer of 1.9, and transmittance (330 nm) after 2-wk storage at 60° of 0.5.

IT 288570-56-9P, 2,2'-Methylenebis(4-hydroxyethyl-6benzotriazolylphenol) distearate 288570-57-0P,
2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dilaurate
288570-58-1P, 2,2'-Methylenebis(4-hydroxyethyl-6benzotriazolylphenol) dibehenate 288570-59-2P,
2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dioleate
 (light-resistant polycarbonate compns. containing
 benzotriazole-based UV absorbers with good
 compatibility)

RN 288570-56-9 HCAPLUS

CN Octadecanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

RN 288570-57-0 HCAPLUS

CN Dodecanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_{10}$$
 - CH_2 -

RN 288570-58-1 HCAPLUS

CN Docosanoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_{20}$$
 - C - CH_2 - CH

RN 288570-59-2 HCAPLUS

CN 9-Octadecenoic acid (9Z)-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-B

IC ICM C08L069-00

ICS C08J005-00; C08K005-3475

CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 28, 38

ST light resistance polycarbonate **UV absorber**methylenebisbenzotriazolephenol; benzotriazolephenol methylenebis
stearate **UV absorber** polycarbonate

IT Light-resistant materials

UV stabilizers

(light-resistant polycarbonate compns. containing benzotriazole-based UV absorbers with good compatibility)

IT Polycarbonates, uses

(light-resistant polycarbonate compns. containing benzotriazole-based UV absorbers with good

compatibility)

IT 112-96-9DP, Octadecyl isocyanate, reaction products with

```
2,2-methylenebis(4-hydroxyethyl-6-benzotriazolephenol)
288570-56-9P, 2,2'-Methylenebis (4-hydroxyethyl-6-
benzotriazolylphenol) distearate 288570-57-0P,
2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dilaurate
288570-58-1P, 2,2'-Methylenebis (4-hydroxyethyl-6-
benzotriazolylphenol) dibehenate 288570-59-2P,
2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol) dioleate
288570-60-5P
   (light-resistant polycarbonate compns. containing
   benzotriazole-based UV absorbers with good
   compatibility)
24936-68-3, Iupilon E 2000F, uses
                                  25037-45-0
   (light-resistant polycarbonate compns. containing
  benzotriazole-based UV absorbers with good
   compatibility)
57-11-4, Stearic acid, reactions
```

IT 57-11-4, Stearic acid, reactions 112-80-1, Oleic acid, reactions 112-85-6, Behenic acid 143-07-7, Lauric acid, reactions 196516-61-7, 2,2'-Methylenebis(4-hydroxyethyl-6-benzotriazolylphenol)

(reactant; light-resistant polycarbonate compns. containing benzotriazole-based UV absorbers with good compatibility)

L38 ANSWER 4 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2002:315011 HCAPLUS

DOCUMENT NUMBER:

136:326372

TITLE:

IT

Ultraviolet-absorbing polyester-polyurethane resins for aqueous emulsion coatings and aqueous polyester-polyurethane emulsions for artificial leather properties.

artificial leather preparation

INVENTOR (S):

Inokami, Kiyotaka; Endo, Toshio; Fujii,

Tatsumi

PATENT ASSIGNEE(S):

Daicel Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 65 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

אנג שוגים שלם

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002032981	A1	20020425	WO 2001-JP9099	
				2001 1017
11 GY			<	
W: CN, KR, US RW: AT, BE, CH, MC, NL, PT,			, FR, GB, GR, IE, IT,	LU,
JP 2002121253	A2	20020423	JP 2000-317216	
				2000 1017
			<	
JP 2002145979	A2	20020522	JP 2000-346500	
				2000
				1114
			<	
JP 2002145976	A2	20020522	JP 2000-346501	
				2000

						1114
JP 2003012748	A2	20030115	JP	< 2001-196432		
						2001
PD 1224000						0628
EP 1334988	A1	20030813	EP	2001-978815		2001
						1017
				<		
R: AT, BE, CH,	DE,	DK, ES, FR,	GB, GI	R, IT, LI, LU,	NL, S	E,
MC, PT, IE, JP 2002226541			מד	2001-348005		
01 2002220341	74	20020814	UP	2001-346005		2001
						1113
****				<		
US 2003144455	A1	20030731	US	2002-172402		2222
						2002 0614
PRIORITY APPLN. INFO.:			JP	2000-317216	Α	0014
						2000
						1017
			TΩ	< 2000-346496	А	
			UF	2000-346496	A	2000
						1114
				<		
			JP	2000-346500	A	
						2000 1114
				<		1114
			JP	2000-346501	A	
						2000
						1114
			σT,	< 2001-196432	A	
			0.2	1001 190192	• • • • • • • • • • • • • • • • • • • •	2001
						0628
				2001 70000		
			WO	2001-JP9099	W	2001
						1017
						_

AB An aqueous emulsion of an UV-absorbing resin prepared by reacting a polyester polyol (A) having uvabsorbing groups with a compound (C) bearing an ionic and/or nonionic surface active group, an organic polyisocyanate (D), and, if necessary, a polyol (B) optionally in an organic solvent (s) to obtain an UV-absorbing resin (i) and neutralizing a solution of the resin (i) with a neutralizing agent (E) is excellent in compatibility, light resistance, bleedout resistance, alkali resistance and solvent resistance and useful in the coating of artificial leather, plastics, woody materials and Artificial leather made from an aqueous polyurethane emulsion constituted of a polyester diol (VIIIA) comprising one diol selected from among 2-n-butyl-2-ethyl-1,3-propanediol, 2,2-diethyl-1,3-propanediol and 2,4-diethyl-1,5-pentanediol, e-caprolactone, and adipic acid as constituent units, a chain-lengthening agent (VIIIB), a compound (C) bearing an ionic and/or nonionic surface active group, an organic polyisocyanate (D), and a neutralizing agent (E) is excellent in softness, light

resistance, resistance to hydrolysis, and heat resistance. Thus, 1,1-bis[3-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol]methane (MBEP) initiated-polycaprolactone was reacted with IPDI and dimethylolbutanoic acid, and neutralized with dimethylaminoethanol to give an aqueous emulsion, 3 parts of which was mixed with 100 parts aqueous polyurethane emulsion (NeoRez R 960), and cast on a Teflon-coated glass plate to give a film showing good light resistance.

IT 214746-68-6P

(intermediate; preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns**. for coatings)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

OH

$$CH_2$$
 CH_2
 CH_2

PAGE 1-B

IT 410074-08-7P 413571-06-9P 413571-09-2P 413571-11-6P (preparation of UV-absorbing aqueous

(preparation of **UV-absorbing** aqueous polyester-polyurethane resin emulsion **compns**. for coatings)

RN 410074-08-7 HCAPLUS

CN Butanoic acid, bis(hydroxymethyl)-, polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane and α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], block, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

 $Me_2N-CH_2-CH_2-OH$

CM

410074-07-6 CRN

CMF (C12 H18 N2 O2 . C6 H12 O4 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4)x

CCI PMS

> CM 3

CRN 214746-68-6

(C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 CMF

CCI PMS

PAGE 1-B

$$-(CH2)5 - In OH$$

CM

CRN 56743-27-2

CMF C6 H12 O4

CCI IDS

CM 5

CRN 4098-71-9 CMF C12 H18 N2 O2

RN 413571-06-9 HCAPLUS

CN Ethanol, 2,2'-(methylimino)bis-, polymer with 5-isocyanato-1 (isocyanatomethyl)-1,3,3-trimethylcyclohexane and
 α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy 3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo 1,6-hexanediyl)]], block, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7 CMF C2 H4 O2

CM 2

CRN 413571-05-8 CMF (C12 H18 N2 O2 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 . C5 H13 N O2)x

CCI PMS

CM 3

CRN 214746-68-6 CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 CCI PMS

HO (CH₂) 5 - C - O
$$\frac{1}{n}$$
 CH₂ - CH₂ $\frac{0}{n}$ CH₂ - CH₂ $\frac{0}{n}$

PAGE 1-B

CM 4

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 5

CRN 105-59-9 CMF C5 H13 N O2

$$\begin{array}{c} \text{Me} \\ | \\ \text{HO-} \text{ CH}_2\text{--} \text{ CH}_2\text{--} \text{ NH-} \text{ CH}_2\text{--} \text{ CH}_2\text{--} \text{ OH} \end{array}$$

RN 413571-09-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer
with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane
and α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-

hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], graft, acetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7 CMF C2 H4 O2

CM 2

CRN 413571-08-1

CMF (C12 H18 N2 O2 . C8 H15 N O2 . (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4)x

CCI PMS

CM 3

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-B

CM 4

CRN 4098-71-9

CMF C12 H18 N2 O2

CM 5

CRN 2867-47-2 CMF C8 H15 N O2

RN 413571-11-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-methoxyethoxy)ethyl ester,
polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3trimethylcyclohexane and α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]],
graft (9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A

OH

OH

$$CH_2$$
 CH_2
 CH_2

PAGE 1-B

CM 2

CRN 45103-58-0 CMF C9 H16 O4

$$^{\rm H_2C}$$
 O $^{\rm ||}$ || $^{\rm ||}$ Me - C- C- O- CH₂- CH₂- O- CH₂- CH₂- OMe

CM 3

CRN 4098-71-9 CMF C12 H18 N2 O2

IC ICM C08G018-48

IT

IT

ICS C08L075-06; D06N003-18; C09D175-06

CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 38, 40, 42, 43

ST **UV absorbing** polyester polyurethane aq emulsion **compn** prepn; coating **UV**

absorbing resin artificial leather plastic wood;

artificial leather prepn polyester polyurethane aq emulsion

IT Polyurethanes, preparation

(acrylic-polyester-, graft; preparation of **vv**-absorbing aqueous polyester-polyurethane resin emulsion

compns. for coatings)

Polyesters, preparation (acrylic-polyurethane-, graft; preparation of **UV**-absorbing aqueous polyester-polyurethane resin emulsion

compns. for coatings)
Polyesters, preparation

(intermediate; preparation of **uv-absorbing** aqueous

```
polyester-polyurethane resin emulsion compns. for
        coatings)
     Polyurethanes, preparation
IT
        (polyester-, block; preparation of UV-absorbing
        aqueous polyester-polyurethane resin emulsion compns. for
        coatings)
     Polyurethanes, preparation
IT
        (polyester-polyurea-, block; preparation of aqueous polyester-
        polyurethane resin emulsion compns. for preparation of
        artificial leathers)
IT
     Polyureas
        (polyester-polyurethane-, block; preparation of aqueous
        polyester-polyurethane resin emulsion compns. for
        preparation of artificial leathers)
IT
     Polyurethanes, uses
        (polyether-; preparation of uv-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     Polyurethanes, uses
        (polyoxyalkylene-; preparation of uv-absorbing
        aqueous polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     Polyesters, preparation
        (polyurea-polyurethane-, block; preparation of aqueous
        polyester-polyurethane resin emulsion compns. for
        preparation of artificial leathers)
     Leather substitutes
IT
        (preparation of (UV-absorbing) aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings or preparation of artificial leathers)
IT
     UV stabilizers
        (preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     Macromonomers
        (preparation of uv-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     Acrylic polymers, uses
        (preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
     Polyurethanes, uses
IT
        (preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
IT
    Wood
        (preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings of)
IT
     Coating materials
        (weather-resistant; preparation of UV-absorbing
        aqueous polyester-polyurethane resin emulsion compns. for
        coatings)
     214746-68-6P
IT
                    215232-60-3P
        (intermediate; preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     413571-07-0P
                    413571-10-5P
        (macromer; preparation of uv-absorbing aqueous
```

```
polyester-polyurethane resin emulsion compns. for
        coatings)
     410074-08-7P 413571-06-9P 413571-09-2P
IT
     413571-11-6P
        (preparation of UV-absorbing aqueous
        polyester-polyurethane resin emulsion compns. for
     100-42-5D, Styrene, polymers with acrylic compds. 9003-53-6,
IT
     Polystyrene 65339-94-8, NeoRez R 960 116788-79-5, Rhoplex WL
          120478-69-5, Superflex E 2000 194554-30-8, NeoCryl A 6092
     223419-36-1, Evafanol AP 12 413614-44-5, F 8559D 413614-53-6,
     NeoCryl A 1091 413614-55-8, Solucote 25-191
        (preparation of uv-absorbing aqueous
       polyester-polyurethane resin emulsion compns. for
        coatings)
IT
     413571-13-8P
                   413571-15-0P
                                  413571-17-2P
                                                413571-19-4P
     413571-21-8P
                   413571-23-0P
                                  413571-25-2P
        (preparation of aqueous polyester-polyurethane resin emulsion
        compns. for preparation of artificial leathers)
REFERENCE COUNT:
                              THERE ARE 11 CITED REFERENCES AVAILABLE
                        11
                              FOR THIS RECORD. ALL CITATIONS AVAILABLE
                              IN THE RE FORMAT
L38 ANSWER 5 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                        2002:301774 HCAPLUS
DOCUMENT NUMBER:
                        136:311351
TITLE:
                        Aromatic polyester articles having transparent
                        abrasion- and weather-resistant hard coating
INVENTOR(S):
                        Shibuya, Takashi; Ishiseki, Kenji; Sanegiri,
                        Yukio; Yamamoto, Hiroshi
PATENT ASSIGNEE(S):
                        Asahi Glass Co., Ltd., Japan
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 8 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                   KIND
                               DATE APPLICATION NO.
                                                                DATE
     -----
                               -----
                                          -----
    JP 2002121307 A2
                               20020423 JP 2000-315560
                                                                 2000
                                                                 1016
                                             < - -
PRIORITY APPLN. INFO.:
                                          JP 2000-315560
                                                                 2000
                                                                 1016
    The aromatic polyester articles have an adherent layer and a hard
AB
    coating layer formed by curing of compns. containing compds.
    having ≥2 polymerizable functional groups, (meth)acryloyl
```

The aromatic polyester articles have an adherent layer and a hard coating layer formed by curing of compns. containing compds. having ≥2 polymerizable functional groups, (meth)acryloyl group-containing benzophenones and/or benzotriazoles as UV absorbers, and photopolymn. initiators. Thus, a composition containing a urethane acrylate (prepared from OH-containing dipentaerythritol polyacrylate and hexamethylene diisocyanate partial isocyanurate compound), Aronix M 325 [caprolactone-modified tris(acryloyloxyethyl) isocyanurate], 2-[2-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole, bis(1,2,2,6,6-pentamethyl-4-

piperidyl) sebacate, and 2-methyl-1-[4-(methylthio)phenyl]-2-morpholinopropan-1-one was applied on T 600E100W42 (PET film having adherent layer) and UV-cured to give a hard coating layer showing good adhesion to the PET film, good transparency, and no discoloration after 1000 h in a sunshine weatherometer.

411208-76-9P, Dipentaerythritol acrylate-hexamethylene diisocyanate-hexamethylene diisocyanate isocyanurate-2-[2'-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole-Aronix M 325 copolymer

(aromatic polyester articles having transparent abrasion- and weather-resistant hard coating layer)

411208-76-9 HCAPLUS

Hexanoic acid, 6-[(1-oxo-2-propenyl)oxy]-, 2-[tetrahydro-2,4,6-trioxo-3,5-bis[2-[(1-oxo-2-propenyl)oxy]ethyl]-1,3,5-triazin-1(2H)-yl]ethyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,6-diisocyanatohexane, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-1,3-propanediol]2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

IT

RN

CN

CRN 170103-27-2 CMF C17 H15 N3 O3

CM 2

CRN 106556-00-7 CMF C24 H31 N3 O11

PAGE 1-A

PAGE 1-B

= CH₂

CM 3

CRN 3779-63-3 CMF C24 H36 N6 O6

OCN -
$$(CH_2)_6$$
 OCN - $(CH_2)_6$ - NCO

OCN - $(CH_2)_6$ OCN - $(CH_2)_6$

CM 4

CRN 822-06-0 CMF C8 H12 N2 O2

OCN--(CH₂)₆-NCO

CM 5

CRN 77641-99-7 CMF C10 H22 O7 . x C3 H4 O2

CM 6

CRN 126-58-9 CMF C10 H22 O7

CRN 79-10-7 CMF C3 H4 O2

0 || но- с- сн--- сн₂

IC ICM C08J007-04

ICS B32B027-18; B32B027-36; C08F002-50; C08F220-10; C09D004-00; C09D005-00; C08L067-02

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

polyester film coating benzophenone **UV absorber**; benzotriazole **UV absorber** coating PET film; transparency weather resistance coating acrylic polyurethane; abrasion resistance coating polyurethane acrylate polyisocyanurate

411208-76-9P, Dipentaerythritol acrylate-hexamethylene diisocyanate-hexamethylene diisocyanate isocyanurate-2-[2'-hydroxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole-Aronix M 325 copolymer 411208-77-0P, Aronix M 325-dipentaerythritol acrylate-hexamethylene diisocyanate-hexamethylene diisocyanate isocyanurate-2-hydroxy-4-(2-acryloyloxyethoxy)benzophenone copolymer

(aromatic polyester articles having transparent abrasion- and weather-resistant hard coating layer)

L38 ANSWER 6 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:847347 HCAPLUS

DOCUMENT NUMBER: 136:7733

TITLE: Soil- and weather-resistant aqueous coating

compositions

INVENTOR(S): Tanaka, Motomi; Fukuzumi, Tatsushi; Ito,

Takaaki

PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001323209	A2	20011122	JP 2000-139933	
				2000
				0512
PRIORITY APPLN. INFO.:			<	
			JP 2000-139933	
				2000
				0512

AB Title compns., also having good storage stability and water resistance, contain polymers prepared from CH2:CR1COOC(CH3)3 (R1 = H, Me, or Et) 5-80, piperidyl-containing ethylenic unsatd. compds. 0.1-10, UV- absorbing ethylenic

unsatd. compds. 0.1-10, ethylenic unsatd. acids 0.1-10, and other ethylenic unsatd. compds. 0-94.7%. An aqueous emulsion containing tert-Bu methacrylate-Bu methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole-2-hydroxy-4-(3methacryloxy-2-hydroxypropoxy) benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer with glass-transition temperature of -19° showed viscosity change of <5% after storing at 40° for 168 h and room temperature for 1 mo, good adhesion to steel plates and acrylic or fluoro resin coatings, and good soil, water, and weather resistance. 374901-44-7P 374901-48-1P, Tert-Butyl acrylate-tert-butyl methacrylate-butyl methacrylate-cyclohexyl methacrylate-2-ethylhexyl acrylate-ethylene glycol methacrylate tetrahydrophthalate-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2,2,6,6-tetramethyl-4-piperidyl methacrylate-2-(2'-

hydroxy-5'-acryloxyethylphenyl)benzotriazole-2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole copolymer

(piperidyl methacrylate- and UV absorbing (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)

RN 374901-44-7 HCAPLUS CN

4-Cyclohexene-1,2-dicarboxylic acid, mono[2-[(2-methyl-1-oxo-2propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, 2-methyl-2-propenoic acid, α -[1-[(nonylphenoxy)methyl]-2-(2propenyloxy) ethyl] $-\omega$ -hydroxypoly(oxy-1,2-ethanediyl) and 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

IT

CRN 170103-27-2 CMF C17 H15 N3 O3

$$H_2C = CH - C - O - CH_2 - CH_2$$

$$N$$

$$N$$

$$OH$$

CM 2

CRN 111144-60-6 CMF (C2 H4 O)n C21 H34 O3 CCI IDS, PMS



$$D1-(CH_2)_8-Me$$

$$H_2C = CH - CH_2 - O - CH_2 - CH_2 - CH_2 - CH_2 - CH_2 - OH_2 - CH_2 - OH_2 - OH_2$$

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 4

CRN 68548-08-3 CMF C14 H25 N O2

CM 5

CRN 63306-05-8 CMF C14 H18 O6

CRN 585-07-9 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{t-BuO-C-C-Me} \end{array}$$

CM 7

CRN 103-11-7 CMF C11 H20 O2

CM 8

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-} \text{C-} \text{C-} \text{Me} \end{array}$$

CM 9

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-- C-- CO}_2\text{H} \end{array}$$

RN 374901-48-1 HCAPLUS

CN 4-Cyclohexene-1,2-dicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, 2-ethylhexyl 2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2 CMF C17 H15 N3 O3

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 3

CRN 68548-08-3 CMF C14 H25 N O2

CRN 63306-05-8 CMF C14 H18 O6

$$\begin{array}{c|c} O & O & CH_2 \\ \parallel & \parallel & \parallel \\ C-O-CH_2-CH_2-O-C-C-Me \\ \\ \hline \\ CO_2H \end{array}$$

CM 5

CRN 31582-45-3 CMF C13 H23 N O2

CM 6

CRN 1663-39-4 CMF C7 H12 O2

$$t-BuO-C-CH=CH_2$$

CM 7

CRN 585-07-9 CMF C8 H14 O2

CRN 103-11-7 CMF C11 H20 O2

CM 9

CRN 101-43-9 CMF C10 H16 O2

CM 10

CRN 97-88-1 CMF C8 H14 O2

IC ICM C09D133-06

ICS C08F220-12; C09D005-00; C09D157-00; C09D157-12

CC 42-7 (Coatings, Inks, and Related Products)

adhesion piperidyl methacrylate UV absorbing acrylic resin coating; storage stability piperidyl methacrylate UV absorbing acrylic resin coating; soil resistance piperidyl methacrylate UV absorbing acrylic resin coating; water resistance piperidyl methacrylate UV absorbing acrylic resin coating

IT Coating materials

(antisoiling, weather-resistant; piperidyl methacrylate- and **UV absorbing** (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other

```
coatings)
IT
     Fluoropolymers, miscellaneous
        (coatings; piperidyl methacrylate- and UV
        absorbing (meth)acrylate-containing acrylic resin aqueous
        coatings with adhesion to steel plates and other coatings)
IT
    Acrylic polymers, uses
        (piperidyl methacrylate- and UV absorbing
        (meth) acrylate-containing acrylic resin aqueous coatings with adhesion
        to steel plates and other coatings)
IT
     374901-41-4P, Tert-Butyl methacrylate-butyl methacrylate-2-
     ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-
    piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-
     benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
     benzotriazole-2-hydroxy-4-(3-methacryloxy-2-
    hydroxypropoxy) benzophenone-2-hydroxy-4-(3-acryloxy-2-
     hydroxypropoxy) benzophenone copolymer 374901-42-5P
     374901-43-6P, Tert-butyl methacrylate-butyl methacrylate-2-
     ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-
     piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-
    benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
    benzotriazole-Adeka Reasoap NE 40 copolymer 374901-44-7P
                   374901-46-9P, Tert-Butyl acrylate-tert-butyl
     374901-45-8P
     methacrylate-ethylene glycol methacrylate tetrahydrophthalate-
     methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl
     methacrylate-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy)
     benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy)
     benzophenone copolymer 374901-48-1P, Tert-Butyl
     acrylate-tert-butyl methacrylate-butyl methacrylate-cyclohexyl
     methacrylate-2-ethylhexyl acrylate-ethylene glycol methacrylate
     tetrahydrophthalate-1,2,2,6,6-pentamethyl-4-piperidyl
     methacrylate-2,2,6,6-tetramethyl-4-piperidyl methacrylate-2-(2'-
     hydroxy-5'-acryloxyethylphenyl)benzotriazole-2-(2'-hydroxy-5'-
     methacryloxyethylphenyl) -2H-benzotriazole copolymer
        (piperidyl methacrylate- and UV absorbing
        (meth)acrylate-containing acrylic resin aqueous coatings with adhesion
        to steel plates and other coatings)
IT
     12597-69-2, Steel, miscellaneous
        (plates; piperidyl methacrylate- and uv
        absorbing (meth)acrylate-containing acrylic resin aqueous
       coatings with adhesion to steel plates and other coatings)
L38 ANSWER 7 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
                   2001:769359 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        135:319607
TITLE:
                        Manufacture of coating compositions
                        for lens with ultrahigh refractive index
INVENTOR(S):
                        Takeshita, Katsuyoshi
PATENT ASSIGNEE(S):
                        Seiko Epson Corp., Japan
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 9 pp.
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                   KIND DATE APPLICATION NO.
     PATENT NO.
                                                                  DATE
     JP 2001294812
                         A2
                                20011023 JP 2000-109403
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2000

0411

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PRIORITY APPLN. INFO.:

JP 2000-109403

2000 0411

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AB Title lens with good durability to especially UV-irradiation is manufactured by coating a epithiosulfide bond-containing lens base material having refractive index >1.65, with a composition comprising (A) titanium oxide microparticle with particle diameter 1-100 mμ and/or titanium oxide-containing composite microparticles, and (B) a ≥1 polymerizable group-containing silane compound Thus, a plastic lens prepared from bis(2,3-epithiopropyl)disulfide-bis(2-mercaptoethyl)sulfide copolymer containing Seesorb 701 and N,N'-Dimethylcyclohexylamine was coated with a hard coat composition comprising γ-Glycidoxypropyltrimethoxysilane, 8RU·A8, L 7604, propylene glycol monomethyl ether, Al(C5H7O2)3, and Mn(C5H7O2)3, and cured at 120° for 2 h to give a hard coat lens, showing high refractive index with good durability and antireflection.

IT 368449-39-2P

CN

(hard coat composition containing; manufacture of coating compns. for lens with ultrahigh refractive index)

RN 368449-39-2 HCAPLUS

Silane, dimethoxymethyl[3-(oxiranylmethoxy)propyl]-, polymer with α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]poly(oxy-1,2-ethanediyl) and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 104810-47-1 CMF (C2 H4 O)n C38 H40 N6 O5 CCI PMS

PAGE 1-A

PAGE 1-B

CRN 65799-47-5 CMF C9 H20 O4 Si

$$CH_2-O-(CH_2)_3-Si-Me$$
OMe
OMe
OMe

CM 3

CRN 2530-83-8 CMF C9 H20 O5 Si

$$CH_2-O-(CH_2)_3-Si-OMe$$
OMe
OMe

IC ICM C09D183-06

ICS C09D001-00; C09D005-00; C09D175-04; C09D183-07; C09D183-08; G02B001-04; G02B001-11; G02C007-02

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38, 73

IT Polyoxyalkylenes, uses

(di-Me polysiloxane-, block, hard coat composition containing; manufacture of coating compns. for lens with ultrahigh refractive index)

IT Polysiloxanes, uses

(di-Me, hydroxypropyl Me, ethers with polyoxyalkylene glycol mono-C1-3-alkyl ether, surfactant; manufacture of coating compns. for lens with ultrahigh refractive index)

IT Polysiloxanes, uses

(di-Me, polyoxyalkylene-, block, hard coat composition containing; manufacture of coating compns. for lens with ultrahigh refractive index)

IT Polyethers, uses

(epoxy, hard coat composition containing; manufacture of coating compns. for lens with ultrahigh refractive index)

IT Antioxidants

Microparticles

(hard coat composition containing; manufacture of coating compns. for lens with ultrahigh refractive index)

IT Antireflective films

Lenses

Primers (paints)

Surfactants

UV stabilizers

(manufacture of coating compns. for lens with ultrahigh refractive index)

IT Silsesquioxanes

(manufacture of coating compns. for lens with ultrahigh

```
refractive index)
IT
     Epoxy resins, uses
        (polyether-, hard coat composition containing; manufacture of
        coating compns. for lens with ultrahigh refractive
        index)
IT
     Polysiloxanes, uses
        (polyoxyalkylene-, FZ-2110; manufacture of coating compns.
        for lens with ultrahigh refractive index)
IT
     Polyoxyalkylenes, uses
        (polysiloxane-, FZ-2110; manufacture of coating compns.
        for lens with ultrahigh refractive index)
     Oxides (inorganic), uses
IT
        (primer containing; manufacture of coating compns. for lens
        with ultrahigh refractive index)
IT
     Epoxy resins, uses
        (thio-, polythioether-, plastic lens containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
IT
     Polyurethanes, uses
        (thio-, primer composition containing; manufacture of primer
        compns. for lens with ultrahigh refractive index)
IT
     Polythioethers
        (thioepoxy, plastic lens containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
     2440-22-4, Seesorb 701
IT
                              25973-55-1, Tinuvin 328
        (UV absorber; manufacture of coating
        compns. for lens with ultrahigh refractive index)
IT
     119-47-1, Antage W400
        (antioxidant; manufacture of coating compns. for lens with
        ultrahigh refractive index)
IT
     368878-25-5, 8RU-A8
        (coating composition containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
IT
     185828-79-9, Optolake 1832
        (colloidal; manufacture of coating compns. for lens with
        ultrahigh refractive index)
IT
     56325-93-0P, \gamma-Glycidoxypropyltrimethoxysilane homopolymer
     162477-44-3P 368449-39-2P
        (hard coat composition containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
IT
     1314-23-4, Zirconium dioxide, uses 13463-67-7, Titanium oxide,
            18282-10-5, Tin dioxide
        (hard coat composition containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
     39317-73-2, Denacol EX-313
IT
        (hard coat composition containing; manufacture of coating
        compns. for lens with ultrahigh refractive index)
     103296-84-0P, 1,2-Bis(glycidylthio)ethane
IT
        (intermediate; preparation of bis(epithiopropylthio)ethane monomer
        in manufacture of coating compns. for lens with ultrahigh
        refractive index)
IT
    7631-86-9, Oscal 1832, uses
        (manufacture of coating compns. for lens with ultrahigh
        refractive index)
    188829-92-7P
IT
        (monomer; preparation of bis(epithiopropylthio)ethane monomer in
       manufacture of coating compns. for lens with ultrahigh
        refractive index)
    188830-00-4P, 1,2-Bis(\beta-epithiopropylthio)ethane homopolymer
IT
    215032-48-7P
                  368453-05-8P
```

(plastic lens containing; manufacture of coating compns. for

lens with ultrahigh refractive index)

IT 96645-57-7P 96663-95-5P, 1,10-Decanedithiol-hexamethylene diisocyanate copolymer

> (primer composition containing; manufacture of primer compns. for lens with ultrahigh refractive index)

106-89-8, Epichlorohydrin, reactions IT

1,2-Dimercaptoethane

(starting material; preparation of bis(epithiopropylthio)ethane monomer in manufacture of coating compns. for lens with ultrahigh refractive index)

L38 ANSWER 8 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:661527 HCAPLUS

DOCUMENT NUMBER:

135:228291

TITLE:

Manufacture of curable acrylic coatings

containing copolymerized UV stabilizers

INVENTOR(S):

Sapper, Ekkehard; Baumgart, Hubert

Basf Coatings A.-G., Germany PCT Int. Appl., 55 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

1	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
•					
ī	WO 2001064803	A1	20010907	WO 2001-EP2285	
					2001
					0301
				<	
	W: BR, JP, US				
7	RW: DE, ES, FR, DE 10010416		20010012	DB 2000 10010416	
4	DE 10010416	Al	20010913	DE 2000-10010416	2000
					0303
				<	0303
PRIORITY APPLN. INFO.:			DE 2000-10010416 A		
					2000
					0303
				<	

GI

$$\begin{array}{c|c}
 & \text{HO} \\
 & \text{N} \\
 & \text{CH}_{2}\text{CH}_{2}\text{O}_{2}\text{CC} = \text{CH}_{2} \\
 & \text{I}
\end{array}$$

AB Phys. - or thermally - and/or radiation-curable compns. for clear or pigmented coatings with good chemical and weathering resistance comprise ≥1 (meth) acrylate copolymer containing \geq 1 polymerizable UV stabilizer built-in as a comonomer into acrylic polymer. For example, a heat-cured solvent-based clear

lacquer comprised a mixture of a tris(alkoxycarbonylamino)triazine crosslinker (alkyl group unspecified) with acrylic acid-Bu methacrylate-2-ethylhexyl methacrylate-2-hydroxyethyl acrylate-2-hydroxypropyl methacrylate-styrene copolymer with benzotriazolyl derivative I.

IT 358974-49-9P 358974-50-2P

(curable acrylic coatings with good chemical and weathering resistance containing copolymd. UV stabilizers)

RN 358974-49-9 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-propenoate, 2-hydroxypropyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

'CRN 135590-39-5 CMF C22 H23 N3 O6

CM 2

CRN 923-26-2 CMF C7 H12 O3

CM 3

CRN 818-61-1 CMF C5 H8 O3

CM 4

CRN 688-84-6

CMF C12 H22 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \\ \mid \\ \text{Et}-\text{CH}-\text{Bu-n} \end{array}$$

CM 5

CRN 100-42-5 CMF C8 H8

H₂C---- CH-- Ph

CM 6

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM 7

CRN 79-10-7 CMF C3 H4 O2

RN 358974-50-2 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-methyl-2-propenoate, cyclohexyl 2-methyl-2-propenoate, propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, 4-hydroxybutyl 2-propenoate, 2-hydroxypropyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 135590-39-5 CMF C22 H23 N3 O6

CRN 2478-10-6 CMF C7 H12 O3

$$0$$
 || HO-- (CH₂)₄-O--C--CH== CH₂

CM 3

CRN 923-26-2 CMF C7 H12 O3

CM 4

CRN 688-84-6 CMF C12 H22 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \\ \parallel \\ \text{Et-CH-Bu-n} \end{array}$$

CM 5

CRN 101-43-9 CMF C10 H16 O2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 7

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-} & \text{C--C-Me} \end{array}$$

CM 8

CRN 79-10-7 CMF C3 H4 O2

IC ICM C09D157-12 ICS B05D007-00

CC 42-10 (Coatings, Inks, and Related Products)

acrylic curable coating polymerizable **uv**absorber benzotriazolyl deriv; UV stabilizer polymerizable benzotriazolyl deriv acrylic coating; benzotriazolyl hydroxyphenylethyl methacrylate polymerizable UV stabilizer acrylic coating

IT 358974-47-7P 358974-48-8P **358974-49-9P** 358974-50-2P 358974-51-3P

(curable acrylic coatings with good chemical and weathering resistance containing copolymd. UV stabilizers)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 9 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

11

ACCESSION NUMBER:

2001:628742 HCAPLUS

DOCUMENT NUMBER:

135:196989

TITLE:

Room-temperature-curable modified silicone

sealing compositions with weather

resistance

INVENTOR(S):

Mori, Hiroshi

PATENT ASSIGNEE(S):

Ohtsuka Chemical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

Japanese

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001234072	A2	20010828	JP 2000-47794	
				2000
				0224
			<	
JP 3280949	B2	20020513		
PRIORITY APPLN. INFO.:			JP 2000-47794	
				2000
				0224

Title compns. contain 100 parts reactive silyl AB group-containing polyethers, 0.01-20 parts aminosilanes, 2-20 parts polymeric UV absorbers prepared from (meth)acrylic benzotriazoles and/or (meth)acrylic triazines 10-50, reactive silyl-containing vinyl compds. 5-20, (meth)acrylate esters 25-85, and polymerizable hindered amines 0-2%, and 0.01-20 parts Sn catalysts. A composition comprising MS polymer S 203 100, TSL 8340 2, 4:3:3 trimethoxysilylpropyl methacrylatetris(trimethylsiloxy)silylpropyl methacrylate-RUVA 93 copolymer 2, Tinuvin 123 0.05, a Sn catalyst 2, and additives 135 parts showed maximum tensile stress 72 N/cm2 and elongation 450% initially and 79 and 380, resp. after 2,000 h under dew-cycle weatherometer.

IT 356566-76-2P 357166-93-9P

> (room temperature-curable **uv** absorber-polymerized polyether silicone sealants with weather resistance)

RN 356566-76-2 HCAPLUS

2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-CN yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with methyl 2-methyl-2-propenoate, MS Polymer S 903, N-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 263909-63-3 CMF C37 H34 N6 O6

CRN 183510-69-2 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 2530-85-0 CMF C10 H20 O5 Si

$$^{\mathrm{H_2C}}$$
 O OMe $^{\mathrm{OMe}}$ $^{\mathrm{Me}}$ $^{\mathrm{Me}}$ $^{\mathrm{C}}$ $^$

CM 4

CRN 1760-24-3 CMF C8 H22 N2 O3 Si

$$\begin{array}{c} \text{OMe} \\ | \\ \text{MeO-Si-} (\text{CH}_2)_3 - \text{NH-CH}_2 - \text{CH}_2 - \text{NH}_2 \\ | \\ \text{OMe} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

RN 357166-93-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Kaneka MS Polymer S 203, methyl 2-methyl-2-propenoate, N-[3-(trimethoxysilyl)propyl]-1,2-ethanediamine and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-63-3 CMF C37 H34 N6 O6

CM 2

CRN 178535-69-8 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 2530-85-0 CMF C10 H20 O5 Si

$$^{\rm H_2C}_{\|\ \|}$$
 OMe $^{\rm OMe}_{\|\ \|}$ Me-C-C-O-(CH₂)₃-Si-OMe $^{\rm OMe}_{\|\ }$ OMe

CM 4

CRN 1760-24-3 CMF C8 H22 N2 O3 Si

MeO-Si-(CH₂)₃-NH-CH₂-CH₂-NH₂

$$\downarrow$$
OMe

```
CM 5
```

CRN 80-62-6 CMF C5 H8 O2

$$H_2C$$
 O \parallel \parallel \parallel \parallel Me-C-C-OMe

IT 263909-63-3P

(room temperature-curable **UV absorber**-polymerized polyether silicone sealants with weather resistance)

RN 263909-63-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

IC ICM C08L083-12

ICS C08F220-06; C08F220-10; C08F220-36; C08F220-60; C08K005-544; C08K005-57; C08L033-14; C09K003-00; C09D171-00; C09D183-06; C09J171-00; C09J183-06; C09K003-10

CC 42-11 (Coatings, Inks, and Related Products)

ST room temp curable polyether polysiloxane sealant weather resistance; **UV absorber** contg polyether polysiloxane sealant

IT Polysiloxanes, uses

(acrylic-polyether-; room temperature-curable **uv** absorber-polymerized polyether silicone sealants with weather resistance)

IT Polyethers, uses

(acrylic-polysiloxane-; room temperature-curable **uv** absorber-polymerized polyether silicone sealants with weather resistance)

IT UV stabilizers

(polymeric; room temperature-curable UV absorber
-polymerized polyether silicone sealants with weather resistance)

IT Sealing compositions

(room-temperature-curable; room temperature-curable **uv absorber**-polymerized polyether silicone sealants with weather resistance)

TT 356566-74-0P 356566-75-1P **356566-76-2P** 357166-90-6P 357166-91-7P 357166-92-8P **357166-93-9P** 357166-94-0P

(room temperature-curable UV absorber-polymerized

polyether silicone sealants with weather resistance)

IT 103597-49-5P 215998-14-4P 263909-48-4P 263909-63-3P (room temperature-curable UV absorber-polymerized polyether silicone sealants with weather resistance)

IT 50-00-0, Formaldehyde, reactions 109-89-7, Diethylamine, reactions 2440-22-4 96478-09-0, 2-(2'-Hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (room temperature-curable UV absorber-polymerized polyether silicone sealants with weather resistance)

L38 ANSWER 10 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:602587 HCAPLUS

DOCUMENT NUMBER: 135:196940

TITLE: 1UV-shielding aqueous coating

compositions

INVENTOR(S): Ishii, Takafumi; Takaesu, Noboru

PATENT ASSIGNEE(S): Nisseki Mitsubishi Oil Corporation, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001226623	A2	20010821	JP 2000-33606	2000
			÷	0210
			<	
PRIORITY APPLN. INFO.:			JP 2000-33606	
				2000
	•			0210

< - -

OTHER SOURCE(S):

MARPAT 135:196940

GI

AB Title compns. comprise (a) ≥20% water, (b) ≥3% hydrophilic solvents, (c) 3-50% acrylic polymers prepared from (c1) ≥50% (based on total monomers) blends of 1-90:10-99 I (R1 = H, Me; R2 = halogen, H; R3 = H, C1-5 alkyl) and (meth)acrylate esters and (c2) 0.3-5 mol/kg COOH-containing vinyl compds. [(meth)acrylic acid and/or α,β-unsatd. β-carboxy carboxylic acids], (d) 0.5-1.1 equiv (based on COOH in the acrylic polymers) NH3 and/or amines, and (e) 0.01-3 equiv epoxy compds. with epoxy equivalent of ≥500. A glass plate was brushed with composition comprising water 79.6, organic solvents 10.4, and a polymer [consisting of 10:10:30:50 methacrylic acid-Me methacrylate-2-ethylhexyl acrylate-I (with R1 = Me, R2 = C1, R3 = Et) copolymer NH3 salt and Epikote 1044] 10% and baked at 150° for 20 min to form a film with pencil hardness H, good

adhesion, and 390-nm UV transparency 0.3%. IT 355018-33-6P 355018-36-9P 356046-09-8P

355018-33-6P 355018-36-9P 356046-09-8P 356046-11-2P 356046-15-6P 356046-18-9P

(benzotriazole (meth)acrylate-containing acrylic epoxy resin-based aqueous coatings with UV-shielding ability)

RN 355018-33-6 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with Epikote 1001B80, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5 CMF C2 H7 N O

 $H_2N-CH_2-CH_2-OH$

CM 2

CRN 355018-32-5

CMF (C26 H30 Cl N3 O6 . C11 H20 O2 . C5 H8 O2 . C4 H6 O2 . Unspecified)x

CCI PMS

CM 3

CRN 253588-79-3 CMF C26 H30 Cl N3 O6

CM 4

CRN 117681-05-7 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 5

CRN 103-11-7

CMF C11 H20 O2

CM 6

CRN 80-62-6 CMF C5 H8 O2

$$^{\text{H}_2\text{C}}_{||}$$
 0 || || Me- C- C- OMe

CM 7

CRN 79-41-4 CMF C4 H6 O2

$$^{\text{CH}_2}_{\parallel}$$
Me-C-CO₂H

RN 355018-36-9 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with (chloromethyl)oxirane, 4,5-dihydro-2-methyloxazole, 2-(1-ethylhexyl)oxazole, 2-ethylhexyl 2-propenoate, 4,4'-(1-methylethylidene)bis[phenol], methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5 CMF C2 H7 N O

 $H_2N - CH_2 - CH_2 - OH$

CM 2

CRN 355018-35-8

CMF (C26 H30 Cl N3 O6 . C15 H16 O2 . C11 H20 O2 . C11 H19 N O . C5 H8 O2 . C4 H7 N O . C4 H6 O2 . C3 H5 Cl O)x

CCI PMS

CRN 355018-34-7 CMF C11 H19 N O

CM 4

CRN 253588-79-3 CMF C26 H30 Cl N3 O6

CM 5

CRN 1120-64-5 CMF C4 H7 N O

CM 6

CRN 106-89-8 CMF C3 H5 Cl O

CM 7

CRN 103-11-7

CMF C11 H20 O2

CM 8

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C--} & \text{C--} & \text{OMe} \end{array}$$

CM 9

CRN 80-05-7 CMF C15 H16 O2

CM 10

CRN 79-41-4 CMF C4 H6 O2

RN 356046-09-8 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with Epikote 1044, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 356046-08-7 CMF (C24 H26 Cl N3 O6 . C11 H20 O2 . C5 H8 O2 . C4 H6 O2 . Unspecified)x CCI PMS

CM 2

CRN 356043-14-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 295777-85-4 CMF C24 H26 Cl N3 O6

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{C}-\text{CH}==\text{CH}_2\\ |\\ \text{Et}-\text{CH}-\text{Bu}-\text{n} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 356046-11-2 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with Adeka Bon-Tighter HUX-XW 5, N-(butoxymethyl)-2-methyl-2-propenamide, butyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, compd. with 2-aminoethanol (9CI) (CA INDEX NAME)

CM 1

CRN 141-43-5 CMF C2 H7 N O

 $H_2N-CH_2-CH_2-OH$

CM 2

CRN 356046-10-1

CMF (C25 H28 Cl N3 O6 . C9 H17 N O2 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2 . Unspecified) x

CCI PMS

CM 3

CRN 356044-67-2 CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 253588-78-2 CMF C25 H28 Cl N3 O6

CM 5

CRN 5153-77-5 CMF C9 H17 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO---} & \text{CH}_2 - \text{NH----} & \text{C----} & \text{Me} \end{array}$$

CM 6

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c}
O \\
\parallel \\
n-BuO-C-CH \longrightarrow CH_2
\end{array}$$

CM 7

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 356046-15-6 HCAPLUS

Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-5-methyl-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, ethyloxirane block polymer with methyloxirane and oxirane hydrogen (2Z)-2-butenedioate methyl dihydrogen phosphate, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], 2-methyl-2-propenamide, phenylmethyl 2-propenoate and 2-propenoic acid, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O $Me_2N-CH_2-CH_2-OH$

CM 2

CRN 356046-14-5

CMF (C23 H25 N3 O6 . C21 H24 O4 . C10 H13 N O2 . C10 H10 O2 . (C4 H8 O . C3 H6 O . C2 H4 O)x . C4 H7 N O . x C4 H4 O4 . C3 H4 O2 . x C H5 O4 P)x

CCI PMS

CM 3

CRN 356046-13-4 CMF C23 H25 N3 O6

CM 4

CRN 2495-35-4 CMF C10 H10 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Ph- CH}_2\text{--o-c-cH} \end{array}$$

CM 5

CRN 1675-54-3 CMF C21 H24 O4

$$\begin{array}{c|c}
O \\
CH_2-O \\
\hline
C \\
Me
\end{array}$$

$$\begin{array}{c|c}
O \\
CH_2
\end{array}$$

CRN 1631-25-0 CMF C10 H13 N O2

CM 7

CRN 79-39-0 CMF C4 H7 N O

$$^{\mathrm{H_2C}}_{\parallel}$$
 $^{\mathrm{C}}_{\parallel}$ $^{\mathrm{Me^-}}$ $^{\mathrm{C^-}}$ $^{\mathrm{NH_2}}$

CM 8

CRN 79-10-7 CMF C3 H4 O2

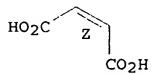
CM 9

CM 10

CRN 812-00-0 CMF C H5 O4 P

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.



CM 12

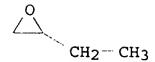
CRN 166089-41-4

CMF (C4 H8 O . C3 H6 O . C2 H4 O) x

CCI PMS

CM 13

CRN 106-88-7 CMF C4 H8 O



CM 14

CRN 75-56-9 CMF C3 H6 O



CM 15

CRN 75-21-8 CMF C2 H4 O



RN 356046-18-9 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-5-methyl-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 1-cyclohexyl-1H-pyrrole-2,5-dione, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxira

ne], 2-methyl-2-propenamide, phenylmethyl 2-propenoate, $\alpha,\alpha',\alpha''-1,2,3$ -propanetriyltris[ω -hydroxypoly(oxy-1,2-ethanediyl)] hydrogen 1,2-benzenedicarboxylate and 2-propenoic acid, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

 $Me_2N-CH_2-CH_2-OH$

CM 2

CRN 356046-17-8
CMF (C23 H25 N3 O6 . C21 H24 O4 . C10 H13 N O2 . C10 H10 O2 . C8
H6 O4 . C4 H7 N O . C3 H4 O2 . x (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3)x

CCI PMS

CM 3

CRN 356046-13-4 CMF C23 H25 N3 O6

CM 4

CRN 2495-35-4 CMF C10 H10 O2

CM 5

CRN 1675-54-3 CMF C21 H24 O4

$$CH_2-O-CH_2$$
 Me
 CH_2-O-CH_2
 Me
 Me

CRN 1631-25-0 CMF C10 H13 N O2

CM 7

CRN 79-39-0 CMF C4 H7 N O

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{NH}_2 \end{array}$$

CM 8

CRN 79-10-7 CMF C3 H4 O2

CM 9

CRN 356046-16-7

CMF C8 H6 O4 . x (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3

CM 10

CRN 31694-55-0

CMF (C2 H4 O)n (C2 H4 O)n (C2 H4 O)n C3 H8 O3

USHA SHRESTHA EIC 1700 REM 4B28

CCI PMS

CM 11

CRN 88-99-3 CMF C8 H6 O4

IC ICM C09D133-06

ICS C09D005-00; C09D163-00

CC 42-10 (Coatings, Inks, and Related Products)

ST UV shielding aq acrylic epoxy resin coating; benzotriazole acrylic UV absorber resin aq coating

TT 355018-33-6P 355018-36-9P 356046-09-8P 356046-11-2P 356046-15-6P 356046-18-9P

(benzotriazole (meth)acrylate-containing acrylic epoxy resin-based aqueous coatings with UV-shielding ability)

L38 ANSWER 11 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:555251 HCAPLUS

DOCUMENT NUMBER: 135:138797

TITLE: Nonyellowing UV-curable coating

compositions and manufacture of

laminates therewith

INVENTOR(S): Ito, Shigekazu; Tsukuda, Hiroyuki; Take,

Kazunobu; Iyota, Takeshi

PATENT ASSIGNEE(S): Riken Vinyl Industry Co., Ltd., Japan; Nikko

Kagaku Kenkyusho

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001207086	A2	20010731	JP 2000-20597	2000 0128

PRIORITY APPLN. INFO.:

JP 2000-20597

2000 0128

<--

Title compns. contain nonarom. (meth) acrylates 100, (meth) acrylic UV absorbers 3-20, photochem. initiators 0.1-10, thio sensitizers 0.5-40, and polyisocyanates 0-50 parts. A PET film was coated with a composition containing dipentaerythritol hexaacrylate 100, RUVA 93 12.5, Irgacure 1800 6.0, pentaerythritol tetrakis(3-mercaptopropionate) 5, and PhMe 200 parts and cured with UV to form a hard film showing good coating adhesion and yellowing prevention after 100 h under weatherometer at 63°.

IT 351884-43-0P 351884-44-1P

(UV-curable polythiol-containing polyacrylate nonyellowing and hard coatings with good adhesion to plastics)

RN 351884-43-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4hydroxyphenyl]ethyl ester, polymer with 2,2-bis[(3-mercapto-1oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate) and
2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA
INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 29570-58-9 CMF C28 H34 O13

CRN 7575-23-7 CMF C17 H28 O8 S4

$$\begin{array}{c} & & & & & & & & & & \\ & & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ &$$

RN 351884-44-1 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 2,2-bis[(3-mercapto-1-oxopropoxy)methyl]-1,3-propanediyl bis(3-mercaptopropanoate), 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 1,3,5-tris(6-isocyanatohexyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 29570-58-9 CMF C28 H34 O13

CRN 7575-23-7 CMF C17 H28 O8 S4

$$\begin{array}{c} O \\ O \\ | \\ | \\ HS-CH_2-C-C-C-CH_2-C-C-CH_2-CH_2-SH \\ | \\ HS-CH_2-CH_2-C-C-CH_2-C-C-CH_2-CH_2-SH \\ | \\ | \\ | \\ O \end{array}$$

CM 4

CRN 3779-63-3 CMF C24 H36 N6 O6

IC ICM C09D004-02

ICS B32B031-28; C09D005-00; C09D175-04

CC 42-10 (Coatings, Inks, and Related Products)

IT 351884-43-0P 351884-44-1P

(UV-curable polythiol-containing polyacrylate nonyellowing and hard coatings with good adhesion to plastics)

L38 ANSWER 12 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:479864 HCAPLUS

DOCUMENT NUMBER: 135:78277

TITLE: Storage-stable aqueous acrylic coating

compositions with good adhesion to

other resin coatings

INVENTOR(S): Tanaka, Motomi; Fukizumi, Tatsushi; Ito,

Takaaki

PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
 ЈР 2001181555	A2	20010703	TD 1000 266250	
01 2001101333	A2	20010703	JP 1999-366358	1999
			<	1224
PRIORITY APPLN. INFO.:			JP 1999-366358	1999
				1224

<--

Title compns., also showing good soil, water, and AB weather resistance, comprise polyhydrazines and polymers pred. from CH2:CRCOOC(CH3)3 (R = H or C1-2 alkyl) 5-80, \overline{vv} absorbing ethylenic unsatd. compds. 0.1-10, ethylenic unsatd. carboxylic acids 0.1-10, CO- or CHO-containing ethylenic unsatd. compds. 0.5-10, and other ethylenic unsatd. compds. 0-94.3%. An aqueous composition containing adipic dihydrazide and Bu methacrylate-tert-Bu methacrylate-diacetone acrylamide-2ethylhexyl acrylate-methacrylic acid-2-(2'-Hydroxy-5'acryloxyethylphenyl) -2H-benzotriazole-2-(2'-Hydroxy-5'methacryloxyethylphenyl)-2H-benzotriazole-Adeka Reasoap NE 40 copolymer showed no precipitation after storing at 40° for 168 h then at room temperature for 1 mo and formed into films with good adhesion to Lumiflon FE 4000 or acrylic emulsion coatings, soil (outdoor, 6 mo), water, and weather resistance.

IT 346433-00-9P 346433-03-2P 346433-05-4P

(aqueous tert-Bu (meth)acrylate resin coatings with adhesion to other resin coatings)

RN 346433-00-9 HCAPLUS

1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, hexanedioic acid dihydrazide and α-[1-[(nonylphenoxy)methyl]-2-(2-propenyloxy)ethyl]-ω-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CN

CRN 170103-27-2 CMF C17 H15 N3 O3

CRN 111144-60-6

CMF (C2 H4 O)n C21 H34 O3

CCI IDS, PMS

$$D1^{--}(CH_2)_8 - Me$$

$$H_2C = CH - CH_2 - O - CH_2 - CH_2 - O - CH_2 - CH_2 - OH_2 - O$$

CM 3

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 4

CRN 51252-88-1 CMF C14 H20 O6

CRN 2873-97-4 CMF C9 H15 N O2

CM 6

CRN 1071-93-8 CMF C6 H14 N4 O2

CM 7

CRN 585-07-9 CMF C8 H14 O2

CM 8

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{CH}_2\text{--O-C-CH} = \text{CH}_2 \\ \mid \\ \text{Et-CH-Bu-n} \end{array}$$

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO--C--C--Me} \end{array}$$

RN 346433-03-2 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-{(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and hexanedioic acid dihydrazide (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2 CMF C17 H15 N3 O3

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CRN 51252-88-1 CMF C14 H20 O6

CM 4

CRN 2873-97-4 CMF C9 H15 N O2

CM 5

CRN 1843-07-8 CMF C19 H18 O6

CRN 1823-18-3 CMF C20 H20 O6

$$H_{2}C$$
 O OH $\| \ \| \ \|$ Me-C-C-O-CH₂-CH-CH₂-O C -Ph OH O

CM 7

CRN 1071-93-8 CMF C6 H14 N4 O2

$$\begin{array}{c|c} & \circ & \circ \\ \parallel & \parallel \\ \text{H}_2\text{N}^{--}\text{NH} \cdot \text{C}^{--} \text{(CH}_2)_4 - \text{C}^{--}\text{NH} - \text{NH}_2 \end{array}$$

CM 8

CRN 585-07-9 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{t-BuO-} & \text{C-} & \text{C--} \text{Me} \end{array}$$

CM 9

CRN 103-11-7 CMF C11 H20 O2

CM 10

CRN 97-88-1

CMF C8 H14 O2

$$\begin{array}{c|c} O & CH_2 \\ \parallel & \parallel \\ n\text{-BuO-} C\text{--} C\text{--} Me \end{array}$$

RN 346433-05-4 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and hexanedioic acid dihydrazide (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2 CMF C17 H15 N3 O3

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} \text{OH} & \text{OH} \\ \text{N} & \text{O} & \text{CH}_2 \\ \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 3

CRN 51252-88-1 CMF C14 H20 O6

CRN 2873-97-4 CMF C9 H15 N O2

CM 5

CRN 1663-39-4 CMF C7 H12 O2

CM 6

CRN 1071-93-8 CMF C6 H14 N4 O2

CM 7

CRN 585-07-9 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{t-BuO-C-C-Me} \end{array}$$

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} O \\ \parallel \\ CH_2-O-C-CH == CH_2 \\ \mid \\ Et-CH-Bu-n \end{array}$$

IC ICM C09D133-06 ICS C09D005-00

CC 42-7 (Coatings, Inks, and Related Products)

IT 346432-97-1P 346432-98-2P 346432-99-3P 346433-00-9P 346433-01-0P 346433-02-1P 346433-03-2P 346433-04-3P 346433-05-4P

(aqueous tert-Bu (meth)acrylate resin coatings with adhesion to other resin coatings)

L38 ANSWER 13 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:167767 HCAPLUS

DOCUMENT NUMBER:

134:212779

TITLE:

Hydrophobically-bound, hydrophilic (meth) acrylic polymer coating

compositions for surgical implants

INVENTOR(S):

Leboeuf, Albert R.

PATENT ASSIGNEE(S):

Alcon Universal Ltd., Switz.

SOURCE:

PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001015627 .	A1	20010308	WO 2000-US23228	2000 0824
			<	
W: AU, BR, CA, RW: AT, BE, CH, MC, NL, PT,	CY, DE		f, FR, GB, GR, IE, IT	, LU,
CA 2381270	AA	20010308	CA 2000-2381270	
				2000 0824
BR 2000013722	Α	20020507	< BR 2000-13722	
	Α	20020307	BR 2000-13722	2000 0824
VG 6200005			<	
US 6388035	B1	20020514	US 2000-645274	2000 0824

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																		0824
												<-	-					
	EP	120780	8			B1		20050	112									
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					IE,	FI,	CY											
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AB	Hyd	rophil	ic c	coat	inas	for	im	ໝlant	s ar	e di	80	100	hes	ጥት	ne cc	atin	ae	are

Hydrophilic coatings for implants are disclosed. The coatings are hydrophobically bound to the implant, but are not covalently cross-linked or covalently anchored to the implant's surface. For example, a coating composition was prepared containing 2-phenylethyl methacrylate 29.32 parts, N-vinyl pyrrolidone 54.64 parts, and polyethylene glycol (400) monomethyl ether monomethacrylate 14.84 parts using Lucirin TPO as a polymerization initiator. The composition was capable of absorbing 88.7% water and had a refractive index of 1.360.

IT 220735-44-4P

(hydrophobically-bound, hydrophilic (meth)acrylic polymer coatings for surgical implants)

RN 220735-44-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-phenylethyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol,

1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

$$\begin{array}{c|c} & \text{Me} \\ & \text{CH}_2 \\ & \text{CH}_2-\text{C-Me} \end{array}$$

CM 2

CRN 3683-12-3 CMF C12 H14 O2

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm H}_{\parallel}$ $^{\rm Me^-}$ C⁻ C⁻ O⁻ CH₂⁻⁻ CH₂⁻⁻ Ph

CM 3

CRN 3530-36-7 CMF C11 H12 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{Ph} \text{--- CH}_2 \text{--- CH} \text{---- CH}_2 \\ \end{array}$$

CM 4

CRN 1070-70-8 CMF C10 H14 O4

$$H_2C = CH - C - O - (CH_2)_4 - O - C - CH = CH_2$$

IC ICM A61F002-00

ICS C09D139-06; C09D139-06; C09D133-06

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 35

IT 98809-58-6

(UV absorber; hydrophobically-bound, hydrophilic (meth) acrylic polymer coatings for surgical implants)

IT 220735-44-4P

(hydrophobically-bound, hydrophilic (meth)acrylic polymer

coatings for surgical implants)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L38 ANSWER 14 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2001:100945 HCAPLUS

DOCUMENT NUMBER:

134:168064

TITLE:

Sunblocking polymers and their novel

formulations

PATENT ASSIGNEE(S):

Biophysica, Inc., USA PCT Int. Appl., 30 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001008647	A1	20010208	WO 1999-US17350	
				1999 0729
			<	
W: AU, JP				
RW: AT, BE, CH,	CY, DE	, DK, ES, F	I, FR, GB, GR, IE, IT,	LU,
MC, NL, PT,				-
AU 9952473	A1	20010219	AU 1999-52473	
				1999
				0729
			<	
EP 1198220	A1	20020424	EP 1999-937690	
				1999
				0729

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY

PRIORITY APPLN. INFO.:

WO 1999-US17350

1999

Α

0729

OTHER SOURCE(S): MARPAT 134:168064

Novel polymeric biol. inert compns. and their intermediates, as well as sunscreen formulations comprising them and making them invisible, are provided for broad range protection from UV radiation. Acrylic polymers comprising at least two different UV absorbing moieties having different light absorbing ranges are employed in conjunction with other monomers to provide sunscreen polymers as microparticles. The polymer microparticles, once imbibed with carrier compds., change the refractive index, thus providing invisible sunscreen formulations which offer enhanced protection without adverse physiol. effects. Polymerization was carried out using 30.83 g UV-A monomer 4-methacryloxydibenzoyl methane, 29.04 g UV-B monomer

N-[2-(4'-dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g UV-C monomer 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide, 9.76 g 2-hydroxyethyl methacrylate, 1.73 g N, N-methylene bisacrylamide, and 500 mL methanol. After flushing with argon, 0.951 g of 2,'2-azobis butyronitrile was added along with 250 mL of MeOH. After stirring at 60° for 20 h, the sunscreen polymer was filtered, washed with methanol, and vacuum dried to a mass of 90.66 g. The sunscreen polymer was formulated into a cream by mixing 1.38 g lanolin, 300 mg vitamin E acetate, 1.476 g copra oil, 180 mg Dow Corning 2503 and 180 mg white petrolatum together with 2.4 g of the polymer prepared and 120 mg titanium dioxide. When applied to the skin, the cream film takes a grayish-white color which becomes transparent over about 15-20 min. Since the particles are in the range of 1 μ in size, transfer into the skin and underlying strata is prevented. 295782-60-4P 324747-89-9P 324747-90-2P

IT

(preparation and formulation of sunscreen acrylic polymers) 295782-60-4 HCAPLUS

RN CN

2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 295782-59-1 CMF C17 H20 O5

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

and the second s

$$^{\rm H_2C}$$
 O $^{\rm H_2C}$ $^{$

CM 4

CRN 97-90-5 CMF C10 H14 O4

RN 324747-89-9 HCAPLUS

2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{O}\text{--}\text{C}\text{--}\text{Me} \end{array}$$

CM 2

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-}$ C- C- O- CH $_2$ - CH $_2$ - OH

CM 3

CRN 97-90-5 CMF C10 H14 O4 a many the state of the

RN 324747-90-2 HCAPLUS

2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 295782-55-7 CMF C16 H20 O4

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}$$
 $^{\rm O}$ $^{\parallel}$ $^{\parallel}$ $^{\rm Me^-}$ $^{\rm C^-}$ $^{\rm C^-}$ $^{\rm O^-}$ $^{\rm CH_2^-}$ $^{\rm CH_2^-}$ $^{\rm OH}$

CM 4

CRN 97-90-5 CMF C10 H14 O4

H₂C O O CH2 $Me^-C^-C^-O^-CH_2^-CH_2^-O^-C^-C^-Me$

IC ICM A61K007-42

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 35

IT 79-10-7DP, Acrylic acid, esters, polymers 157174-87-3P 295782-58-0P 295782-60-4P 324747-89-9P

324747-90-2P 324747-92-4P 324747-93-5P

(preparation and formulation of sunscreen acrylic polymers) REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L38 ANSWER 15 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:909241 HCAPLUS

DOCUMENT NUMBER:

134:72357

TITLE:

Benzotriazole UV absorbers

having enhanced durability

INVENTOR (S):

Ravichandran, Ramanathan; Suhadolnik, Joseph; Wood, Mervin G.; Debellis, Anthony; Detlefsen, Robert E.; Iyengar, Revathi; Wolf, Jean-pierre

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corp., USA

SOURCE:

U.S., 29 pp., Cont.-in-part of U.S. 5,977,219.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6166218	A	20001226	US 1999-234880	1999
US 5977219	Α	19991102	< US 1997-961127	1997
GB 2346369	A1	20000809	< GB 2000-610	2000
GB 2346369 IT 1317727	B2 B1	20020417 20030715	< IT 2000-MI46	0113
DE 10001832	A1	20000727	< DE 2000-10001832	2000 0117 2000
BE 1013234	А3	20011106	< BE 2000-34	0118

USHA SHRESTHA EIC 1700 REM 4B28

						2000 0118
CA 2296246	7.7	20000721	C D	<		
CR 2230240	AA	20000721	CA	2000-2296246		2000
						0119
PP 00000000	_			<		
BR 200000124	A	20000926	BR	2000-124		2000
						0119
				<		0113
NL 1014139	A1	20000724	NL	2000-1014139		
						2000
				<		0120
NL 1014139	C2	20010515		•		
JP 2000212170	A2	20000802	JP	2000-11194		
						2000
				<		0120
FR 2789388	A1	20000811	FR	2000-673		
						2000
						0120
FR 2789388	В1	20051118		<		
CN 1265395	A	20000906	CN	2000-101136		
						2000
						0120
ES 2160086	A1	20011016	FC	< 2000-111		
=5 230000	7.	20011010	23	2000-111		2000
						0120
ES 2160086	D.1	20000555		<		
US 6262151	B1 B1	20020616 20010717	IIC	2000-614527		
	21	20010717	US	2000-014527		2000
						0712
US 2001007886	2.2	22212712		<		
03 2001007886	Al	20010712	US	2001-760089		2001
						0111
				<		*
US 2002065341	A1	20020530	US	2001-851453		
						2001 0507
				<		0507
US 2002099221	A1	20020725	US	2001-23257		
						2001
						1218
US 6515051	В2	20030204		<		
PRIORITY APPLN. INFO.:			US	1997-961127	A2	
						1997
						1030
	•		US	< 1996-745146	A	
					11	1996
						1107
			***	<	_	
			บร	1999-234880	A	

USHA SHRESTHA EIC 1700 REM 4B28

1999 0121 <--US 2000-614527 A3 2000 0712 <--US 2001-851453 A1 2001 0507

OTHER SOURCE(S): MARPAT 134:72357

Benzotriazole UV absorbers which are substituted at the 5-position of the benzo ring by an electron withdrawing group exhibit enhanced durability and very low loss rates when incorporated into automotive coatings. This is particularly the case when the 3-position of the Ph ring is also substituted by Ph or phenylalkyl such as α -cumyl. Compds. where the 5-position of the benzo ring are substituted by perfluoroalkyl such as trifluoromethyl are particularly of interest for both their enhanced durability and for their excellent solubility and excellent color properties in some thermoplastic compns. when the Ph ring is substituted at the 3-position by hydrogen or tert-alkyl.

IT 314274-59-4P 314274-60-7P

(benzotriazole **UV** absorbers having enhanced durability)

RN 314274-59-4 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(trifluoromethyl)-2H-benzotriazol-2-yl]-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

RN 314274-60-7 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(trifluoromethyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

```
HO-CH2
Me-C-C-O-CH<sub>2</sub>-CH-O-C-CH<sub>2</sub>-CH<sub>2</sub>
                                    Bu-t
                               OH
IC
     ICM C07D249-20
     ICS
         C07D403-10
INCL 548257000
     37-6 (Plastics Manufacture and Processing)
     Section cross-reference(s): 28, 42
     thermoplastic benzotriazole UV absorber;
ST
     automotive coating benzotriazole uv absorber
IT
     UV stabilizers
        (benzotriazole UV absorbers having enhanced
        durability)
     Polycarbonates, properties
IT
     Polyoxymethylenes, properties
        (benzotriazole UV absorbers having enhanced
        durability)
IT
     Automobiles
        (benzotriazole UV absorbers having enhanced
        durability for automotive coatings)
IT
     Acrylic polymers, properties
        (thermoset clear coat; benzotriazole uv
        absorbers having enhanced durability)
IT
     Coating materials
        (thermosetting, acrylic; benzotriazole uv
        absorbers having enhanced durability)
IT
     9002-86-2, PVC
        (Geon 27; benzotriazole UV absorbers having
        enhanced durability)
IT
     24936-68-3, Makrolon 2608-1000, properties
        (Lexan 145; benzotriazole UV absorbers
        having enhanced durability)
IT
     24968-12-5, Polybutylene terephthalate
        (Valox 315-1001; benzotriazole UV absorbers
        having enhanced durability)
    73936-91-1P, 2-(2-Hydroxy-3-\alpha-cumyl-5-tert-octylphenyl)-2H-
IT
     benzotriazole
                     207738-63-4P
                                     207738-64-5P
                                                     207738-93-0P
     286471-11-2P
                    286471-12-3P
                                    286471-14-5P
                                                    286471-15-6P
     286471-17-8P
                    286471-18-9P
                                    286471-19-0P
                                                    286471-20-3P
     286471-21-4P
                    286471-25-8P
                                    286471-26-9P
                                                    286471-27-0P
     286471-28-1P
                    286471-29-2P
                                    286471-30-5P
                                                    286471-31-6P
     286471-32-7P
                    286471-33-8P
                                    286471-34-9P
                                                    286471-36-1P
     286471-37-2P
                    286476-92-4P
                                    305322-07-0P
                                                    305322-08-1P
     314274-39-0P
                    314274-40-3P
                                    314274-41-4P
                                                    314274-42-5P
     314274-43-6P
                    314274-44-7P
                                    314274-45-8P
                                                    314274-46-9P
     314274-47-0P
                    314274-48-1P
                                    314274-49-2P
                                                    314274-50-5P
     314274-51-6P
                    314274-52-7P
                                    314274-53-8P
                                                    314274-56-1P
     314274-57-2P
                    314274-58-3P 314274-59-4P
     314274-60-7P
        (benzotriazole UV absorbers having enhanced
```

durability)

3987-92-6P, Methyl 4-amino-3-nitrobenzoate 23624-49-9DP, dialkyl IT 155436-75-2DP, dialkyl derivs. 158548-40-4DP, dialkyl derivs. derivs. 207738-65-6P 207738-66-7P 207738-67-8P 207738-69-0P 207738-70-3P 207738-71-4P 207738-72-5P 207738-91-8P 207738-92-9P 207738-95-2P 247933-51-3P 261638-85-1P 261638-86-2P 286471-10-1P 305322-10-5P 314274-25-4P 314274-26-5P 314274-27-6P 314274-28-7P (benzotriazole UV absorbers having enhanced durability)

9003-53-6, Polystyrene 25037-45-0, Bisphenol A-carbonic acid copolymer 26062-94-2, Polybutylene terephthalate 315194-51-5, Delrin 500P-NC010

(benzotriazole UV absorbers having enhanced durability)

IT 108-98-5, Thiophenol, reactions 400-98-6, 4-Amino-3nitrobenzotrifluoride 1588-83-6, 4-Amino-3-nitrobenzoic acid
3864-99-1, 5-Chloro-2-(2-hydroxy-3,5-di-tert-butylphenyl)-2Hbenzotriazole 73936-80-8, 2-α-Cumyl-4-tert-octylphenol
207738-68-9

(benzotriazole **UV** absorbers having enhanced durability)

REFERENCE COUNT:

THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 16 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:694315 HCAPLUS

DOCUMENT NUMBER:

133:253960

TITLE:

UV-shielding benzotriazole-containing acrylic

copolymers and their compositions

with uniform dispersibility in aqueous

solutions

INVENTOR(S):

Sasaki, Makoto; Ishii, Takafumi; Yuasa,

Hitoshi

PATENT ASSIGNEE(S): SOURCE:

Nisseki Mitsubishi K. K., Japan Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				22
JP 2000273124	A2	20001003	JP 1999-85530	
				1999
				0329
			<	0323
JP 2001026739	A2	20010130	JP 1999-199586	
	- 12	20010130	OF 1999-199586	1000
				1999
				0713
ED 1041004			< - -	
EP 1041094	A1	20001004	EP 2000-850057	
				2000
				0329
			<	
EP 1041094	D1	20050600		

EP 1041094 B1 20050608
R: AT BE CH DE DY ES ED CD

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, SI, LT, LV, FI, RO
US 6368521 B1 20020409 US 2000-537644

2000
0329

PRIORITY APPLN. INFO.:

JP 1999-199586 A

1999
0713

< - -

I

JP 1999-85530

Α

1999 0329

GI

The copolymers, useful for coatings for glass, etc., are manufactured AB from monomer mixts. containing ≥50% (meth) acrylates containing 1-90% (meth) acrylates I (R1 = H, Me; R2 = halo, H; R3 = H, C1-5 alkyl). Thus, 2.5 μ m-thick coating containing 83/17 I (R1 = Me, R2 = Cl, R3 = Et)-Bu acrylate copolymer showed pencil hardness H, UV transmittance (390 nm) 2.3%, and good adhesion to a glass. 253588-79-3DP, polymers with methacrylates and styrene IT 295777-86-5P 295777-87-6P 295777-88-7P 295777-89-8P 295777-90-1P 295777-91-2P (UV-shielding benzotriazole-containing acrylic copolymers with uniform dispersibility in aqueous solns. for coatings) 253588-79-3 HCAPLUS RNBenzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-CN dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

RN 295777-86-5 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-propenoate (9CI) (CA INDEX NAME)

CRN 295777-85-4 CMF C24 H26 Cl N3 O6

CM 2

CRN 141-32-2 CMF C7 H12 O2

RN 295777-87-6 HCAPLUS

Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with methyl 2-methyl-2-propenoate, 2-methyl-2-propenoic acid and N,N,2-trimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 253588-78-2 CMF C25 H28 Cl N3 O6

CM 2

CRN 6976-91-6

CMF C6 H11 N O

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

$$\mathbb{C}^{H_2}$$
 \parallel
 $\mathbb{M}e^-C^-CO_2H$

RN 295777-88-7 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with cyclohexyl 2-propenoate, 2-ethylhexyl 2-methyl-2-propenoate, 2-(2-hydroxyethoxy)ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and phenylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 253588-79-3 CMF C26 H30 Cl N3 O6

CM 2

CRN 13533-05-6 CMF C7 H12 O4

$$\begin{array}{c} \text{O} \\ || \\ \text{HO-CH}_2\text{--CH}_2\text{--O-CH}_2\text{--CH}_2\text{--O-C-CH} \\ \end{array}$$

CM 3

CRN 3066-71-5 CMF C9 H14 O2

$$O = C + CH = CH_2$$

CM 4

CRN 2495-35-4 CMF C10 H10 O2

CM 5

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-}$ $^{\rm C-}$ $^{\rm C-}$ $^{\rm O-}$ $^{\rm CH_2-}$ $^{\rm CH_2-}$ $^{\rm OH}$

CM 6

CRN 688-84-6 CMF C12 H22 O2

RN 295777-89-8 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 253588-79-3 CMF C26 H30 Cl N3 O6

CM 2

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O}-\text{CH}-\text{CH}-\text{CH}_2\\ |\\ \text{Et-- CH-- Bu-n} \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

A CONTRACT

CM 4

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ \parallel \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

RN 295777-90-1 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-ethyl-4-hydroxy-, 2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 253588-80-6 CMF C23 H24 Cl N3 O6

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO- C- CH---- CH}_2 \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

RN 295777-91-2 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, 2-ethylhexyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 253588-79-3 CMF C26 H30 Cl N3 O6

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 100-42-5 CMF C8 H8

H2C== CH- Ph

```
CM
     CRN 97-88-1
     CMF C8 H14 O2
        CH<sub>2</sub>
n-BuO-C-C-Me
     CM
          5
     CRN 80-62-6
     CMF C5 H8 O2
 H<sub>2</sub>C O
Me^-C-C-OMe
     CM
          6
     CRN 79-41-4
     CMF C4 H6 O2
   CH_2
Me-C-CO2H
IC
     ICM C08F220-36
     ICS C09D133-14
     42-7 (Coatings, Inks, and Related Products)
CC
     Section cross-reference(s): 35, 57
IT
     Coating materials
        (UV-absorbing; UV-shielding
        benzotriazole-containing acrylic copolymers with uniform
        dispersibility in aqueous solns. for coatings)
     80-62-6DP, Methyl methacrylate, polymers with benzotriazole-containing
IT
     methacrylates and styrene
                                100-42-5DP, Styrene, polymers with
     benzotriazole-containing methacrylates 868-77-9DP, 2-Hydroxyethyl
     methacrylate, polymers with benzotriazole-containing methacrylates and
     styrene 253588-79-3DP, polymers with methacrylates and
     styrene 295777-86-5P 295777-87-6P
     295777-88-7P 295777-89-8P 295777-90-1P
     295777-91-2P
        (UV-shielding benzotriazole-containing acrylic copolymers with
        uniform dispersibility in aqueous solns. for coatings)
```

L38 ANSWER 17 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2000:680345 HCAPLUS

DOCUMENT NUMBER:

133:256572

TITLE:

Sunblocking polymers and their novel

formulations

INVENTOR(S): Sovak, Milos; Terry, Ronald C.; Douglass,

James G., III; Bakir, Farid; Brown, Jason;

Cugley, Peter

PATENT ASSIGNEE(S): Biophysica, Inc., USA

SOURCE: U.S., 10 pp., Cont.-in-part of U.S. Ser. No.

46,945, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	AP	PLICATION NO.		DATE
US 6123928	A	20000926	US	1998-119836		1998
						0721
US 5487885	А	10060120		<		
00 040/880	A	19960130	US	1993-164881		
						1993
						1209
US 5741924	А	19980421	HC	<		
00 0.11021	Δ.	19900421	US	1995-490316		1995
						0614
				<		0014
PRIORITY APPLN. INFO.:			IIC	1992-994426	В2	
			0.5	1002 004420	BZ	1992
						1221
				<		1221
			US	1993-164881	A2	
						1993
						1209
				<		
			US	1995-490316	A2	
						1995
						0614
				<		
			US	1998-46945	B2	
						1998
						0323

OTHER SOURCE(S):

MARPAT 133:256572 Novel polymeric biol. inert compns. and their intermediates, as well as sunscreen formulations comprising them and making them invisible, are provided for broad range protection from UV radiation. Acrylic polymers comprising at least two different UV absorbing moieties having different light absorbing ranges are employed in conjunction with other monomers to provide sunscreen polymers as microparticles. The polymer microparticles, once imbibed with carrier compds., change the refractive index, thus providing invisible sunscreen formulations which offer enhanced protection without adverse physiol. effects. A 1 L flask was charged with 30.83 g 4-methacryloxydibenzoyl methane, 29.04 g N-[2-(4'dimethylaminobenzoyl)oxypropyl] methacrylamide, 31.13 g 4-methoxy-N-[1-(4-methacryloxyphenyl)] benzamide, 9.76 g 2-hydroxyethylmethacrylate, 1.73 g N, N-methylene bisacrylamide,

and 500 mL methanol. After flushing with argon, 0.951 g of 2,'2-azobisbutyronitrile was added along with 250 mL of MeOH. After stirring at 60° for 20 h the sunscreen polymer was filtered, washed with methanol, and vacuum dried to a mass of 90.66 g. Into a ball-grinder 1.38 g of lanolin, 300 mg of vitamin E acetate, 1.476 g of copra oil, 180 mg of silicone wax (Dow Corning 2503) and 180 mg of white petrolatum were added together with 2.4 g of the above polymer and 120 mg of titanium dioxide and were mixed at room temperature for 90 min to produce a sunscreen cream. 295782-60-4P 295782-61-5P 295782-62-6P

(sunblocking polymers and their novel formulations)

RN 295782-60-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl

2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and

3-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]propyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

IT

CRN 295782-59-1 CMF C17 H20 O5

$$CH = CH - C - O - (CH2)3 - O - C - C - Me$$
MeO

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me^-}$ $^{\rm C^-}$ $^{\rm C^-}$ $^{\rm O^-}$ $^{\rm CH_2^-}$ $^{\rm CH_2^-}$ $^{\rm OH}$

CRN 97-90-5 CMF C10 H14 O4

RN 295782-61-5 HCAPLUS

2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 107162-92-5 CMF C16 H18 O5

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{O} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$H_2C$$
 O $\| \ \|$ $\|$ $Me-C-CH_2-CH_2-OH$

CRN 97-90-5 CMF C10 H14 O4

RN 295782-62-6 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 4-(1,3-dioxo-3-phenylpropyl)phenyl 2-methyl-2-propenoate and 2-[[3-(4-methoxyphenyl)-1-oxo-2-propenyl]oxy]ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 157174-85-1 CMF C19 H16 O4

CM 2

CRN 107162-92-5 CMF C16 H18 O5

$$CH = CH - C - O - CH_2 - CH_2 - O - C - C - Me$$

MeO

CM 3

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

IC ICM A61K007-42

ICS A61K007-44; A61K007-00; A61K031-78

INCL 424059000

62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 35, 38

IT185811-85-2P 295782-57-9P 295782-54-6P 295782-58-0P

295782-60-4P 295782-61-5P 295782-62-6P

(sunblocking polymers and their novel formulations)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L38 ANSWER 18 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

133:90222

DOCUMENT NUMBER: TITLE:

Polymeric stabilizers having low

polydispersity

CODEN: PIXXD2

INVENTOR(S):

Steinmann, Alfred; Roth, Michael; Stauffer, Werner; Nesvadba, Peter; Muhlebach, Andreas

Ciba Specialty Chemicals Holding Inc., Switz.

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 71 pp.

2000:457143 HCAPLUS

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIN	D	DATE			APPL	ICAT	ION I	NO.		DA	TE	
		-														
WO	2000	0392	09		A1		2000	0706	1	WO 1	999-	EP98	78			
															19	99
															12	14
										<						
	W:	ΑE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	
							DM,									
							IS,									
							MA,									
							SE,									
							VN,									
			RU,			•	- ,	•	,	,	,	,	21,	,	,	
	RW:		•	•		MW.	SD,	SL.	SZ.	T7.	UG	7.W	ΔΤ	BE	СН	
							FR,									
							CI,									
		TD,		DO,	Cr,	CG,	CI,	Cia,	GA,	GIV,	GW,	riii,	MIK,	ME,	SN,	
CA	2353	-			ΔΔ		2000	1706		ግ አ 1 የ	999	1252	000			
					2000	,,,,,	•	CA I.	<i>,,,,,</i> ,,	2333	900		10	00		
																99
															12	14

EP 1144496	A1	20011017	EP 1999-962256	
		20011017	LF 1999 902230	1999
				1214
			<	1211
EP 1144496	B1	20040317	•	
			GB, GR, IT, LI, LU,	NL. SE.
		LT, LV, FI,		,,
JP 2002533548				
				1999
				1214
			<	
AT 262005	E	20040415	AT 1999-962256	
				1999
				1214
			<	
ES 2216610	T3	20041016	ES 1999-962256	
				1999
				1214
			<	
US 6583245	B1	20030624	US 2001-868762	
				2001
				0621
DDIODIGU ADDIN TUDO			<	_
PRIORITY APPLN. INFO.:			EP 1998-811259	A
				1998
				1223
			<	**
			WO 1999-EP9878	W
				1999
				1214
			<	

AB The present invention relates to an a polymerizable compn ., comprising (a) at least one compound (RG)-A-(Stab), wherein (Stab) is a light stabilizer radical selected from the group consisting of sterically hindered amines, hydroxyphenyl-striazines, hydroxyphenyl-benzotriazols and o-hydroxy-benzophenones; A is a spacer group or a direct bond; and (RG) is a group containing at least one ethylenically unsatd. functional group; and either (b1) a compound Y-X, wherein X is a group having ≥1 carbon atom and is such that the free radical derived from X is capable of initiating polymerization and Y represents a group being such that the free radical Y<<bul derived from it forms a stable free radical; or (b2) a stable free radical Y<<bul and a free radical source from which a radical is formed capable of initiating polymerization; or (b3) a compound [In]p[Hal]q and a catalytically effective amount of an oxidizable transition metal complex catalyst, wherein p represents a number greater than zero and defines the number of initiator fragments; q represents a number greater than zero; [In] represents a radically transferable atom or group capable of initiating polymerization and [Hal] represents a leaving group; and optionally (c) one or more ethylenically unsatd. monomers or oligomers different from those of formula (I). The polymers are useful as heat or light stabilizers.

IT 281225-04-5P

(stabilizer; polymeric stabilizers having low polydispersity)
RN 281225-04-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, homopolymer (9CI) (CA INDEX NAME)

CRN 135590-53-3 CMF C26 H31 N3 O6

IC ICM C08K005-34

ICS C08K005-07

CC 37-6 (Plastics Manufacture and Processing)

IT 27028-34-8P, Poly(4,6-bis(2,4-dimethylphenyl)-2(2-hydroxy-4acryloxyphenyl) -triazine) 31229-19-3P, Poly(4-acryloyloxy-2hydroxybenzophenone) 70195-66-3P 70195-78-7P, Poly(4-methacryloyloxy-1,2,2,6,6-pentamethylpiperidine) 70195-81-2P, Poly(4-acryloyloxy-1,2,2,6,6-pentamethylpiperidine) 73576-06-4P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-n-butyl acrylate copolymer 96478-13-6P, NORBLOC 7966 homopolymer 153175-43-0P, Methyl methacrylate-NORBLOC 7966 copolymer 281224-98-4P 281224-97-3P 281224-99-5P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-2-hydroxyethylacrylate block copolymer 281225-01-2P, 4-Acryloyloxy-1,2,2,6,6-281225-00-1P pentamethylpiperidine-styrene block copolymer 281225-02-3P, 4-Acryloyloxy-1,2,2,6,6-pentamethylpiperidine-butyl acrylate block 281225-03-4P, 4-Acryloyloxy-1,2,2,6,6pentamethylpiperidine-methyl methacrylate block copolymer 281225-04-5P

(stabilizer; polymeric stabilizers having low polydispersity)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE
FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L38 ANSWER 19 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:344292 HCAPLUS

DOCUMENT NUMBER: 132:348682

TITLE: IV-resists

TITLE: UV-resistant, white laminated plastic film

INVENTOR(S): Tanaka, Yoshio; Mitsumura, Takashi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000141552	A2	20000523	JP 1998-325261	1998 1116

PRIORITY APPLN. INFO.:

JP 1998-325261

1998 1116

AB Title film comprises a white base film which is laminated at least on its one side with UV-absorbing layers. Thus, poly(ethylene terephthalate) (PET) containing 5% TiO2, PET containing 10% BaSO4, and PET containing 5% TiO2 were coextruded at ratio 5:90:5, biaxially oriented, set at 230°, and cast to give a 100-μm thick composite film, which was coated on 1 side with a composition comprising 30:70 2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole (I) -Me methacrylate copolymer 95, Nikkacoat FS 12 (modified saturated polyester resin) 4, Cymel 370 (methylolated melamine resin) 1, and 1:1 PhMe-MEK mixture 400 parts. It was top-coated with a composition comprising I 20, dipentaerythritol hexaacrylate 68, Aronix M 7100 (acrylic oligomer) 8, 2-hydroxypropyl acrylate 4, Irgacure 183 (light-polymerization initiator) 4, and a 1:1 PhMe-MEK mixture 312 parts then exposed to UV to give test pieces having whiteness 98 and 96%, tensile strength 130 and 104 MPa, and elongation 102 and 85%, resp., initially and after accelerated weathering test, resp. IT

223916-99-2P 223917-04-2P

(UV-absorbing topcoat; white, laminated plastic films with UV-absorbing coating layers)

RN 223916-99-2 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-CN hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-{[(1-oxo-2propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 76723-57-4 CMF Unspecified CCI MAN

STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 29570-58-9 CMF C28 H34 O13

CM 4

CRN 999-61-1 CMF C6 H10 O3

RN 223917-04-2 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate, methyl 2-methyl-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{O} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 2

CRN 76723-57-4 CMF Unspecified CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 29570-58-9 CMF C28 H34 O13

CM

CRN 999-61-1 CMF C6 H10 O3

$$OH$$
 O $||$ $||$ $Me-CH-CH_2-O-C-CH=-CH_2$

CM 5

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

IC ICM B32B027-18

ICS B29C047-06; C09K003-00; B29C055-12; B29L009-00

CC 38-3 (Plastics Fabrication and Uses)

UV resistant white laminated plastic film; polyethylene ST terephthalate based laminated white film; PET titania filler laminated white film; barium sulfate filler PET laminated white film; weather resistance UV absorbing coating film; coating UV absorber benzotriazole acrylic copolymer IT

Coating materials

(UV-absorbing; white, laminated plastic films with UV-absorbing coating layers)

ITPolyesters, uses

(acrylic, with benzotriazole group, uv-

```
absorbing undercoat; white, laminated plastic films
        with UV-absorbing coating layers)
IT
     Polyoxyalkylenes, uses
        (base PET layer containing; white, laminated plastic films with
        UV-absorbing coating layers)
IT
     Polyesters, uses
        (base films, containing white pigments; white, laminated plastic
        films with UV-absorbing coating layers)
IT
     Coating materials
        (weather-resistant; white, laminated plastic films with
        UV-absorbing coating layers)
IT
     Laminated plastic films
        (white, laminated plastic films with uv-
        absorbing coating layers)
IT
     159484-58-9P, Acrylic acid-butyl acrylate-2-(2'-hydroxy-5'-
     methacryloxyethylphenyl) -2H-benzotriazole-methyl methacrylate
     copolymer
        (UV-absorbing coating; white, laminated
        plastic films with UV-absorbing coating
        layers)
     223916-99-2P 223917-04-2P
IT
        (UV-absorbing topcoat; white, laminated
        plastic films with UV-absorbing coating
        layers)
IT
     268734-26-5P
        (UV-absorbing undercoat; white, laminated
        plastic films with UV-absorbing coating
        layers)
IT
     9016-80-2, Polymethylpentene
                                    25322-68-3
        (base PET layer containing; white, laminated plastic films with
        UV-absorbing coating layers)
IT
     25038-59-9, Poly(ethylene terephthalate), uses
        (base films, containing white pigments; white, laminated plastic
        films with uv-absorbing coating layers)
IT
     7727-43-7, Barium sulfate 13463-67-7, Titania, uses
        (pigments, in PET base layer; white, laminated plastic films
        with UV-absorbing coating layers)
IT
     220463-40-1P, Aronix M 7100-dipentaerythritol hexaacrylate-2-
     hydroxypropyl acrylate copolymer
        (topcoat; white, laminated plastic films with uv-
        absorbing coating layers)
IT
     268746-97-0, Kayanova POP 062
        (topcoat; white, laminated plastic films with UV-
        absorbing coating layers)
L38 ANSWER 20 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2000:277719 HCAPLUS
DOCUMENT NUMBER:
                         132:315620
TITLE:
                         Electrochromic device
INVENTOR(S):
                         Nishikitani, Yoshinori; Sugiura, Izuru;
                         Kobayashi, Masaaki; Imafuku, Hiroshi
PATENT ASSIGNEE(S):
                         Nippon Mitsubishi Oil Corporation, Japan
SOURCE:
                         Eur. Pat. Appl., 40 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
                         1
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
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USHA SHRESTHA EIC 1700 REM 4B28

EP 995786 **A**1 20000426 EP 1999-850155 1999 1020 <---EP 995786 B1 20030108 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2000131722 **A2** 20000512 JP 1998-300764 1998 1022 <--US 6208452 20010327 B1 US 1999-425330 1999 1022 PRIORITY APPLN. INFO.: JP 1998-300764 1998 1022

GI

$$CH_{2} = \overset{R^{1}}{C} - \underbrace{\begin{pmatrix} C - O \\ II \\ O \end{pmatrix}}_{a} \overset{+}{X^{-}} \overset{-}{X^{-}} \overset{+}{X^{-}} \overset{-}{X^{-}} \overset{+}{X^{-}} \overset{-}{X^{-}} \overset{+}{X^{-}} \overset{-}{X^{-}} \overset{-$$

$$CH_2 = \overset{R^4}{C} + \overset{R^6}{+} \overset{R^6}{+} \overset{R^7}{-} \overset{I}{-} R^8 \quad II$$

$$CH_2 = C - R^{10} - R^{11}$$

$$R^{11}$$

$$N - R^{13}$$

$$R^{12}$$

$$R^{12}$$

$$R^{11}$$

Electrochromic devices are described which comprise an ion conductive layer obtained by curing a composition comprising a bipyridinium compound described by the general formula I (X- and Y- = anions independently selected from halo anion, ClO4-, BF4-, PF6-, CH3COO- and CH3(C6H4)SO3-; R1 = H or C1-5 alkyl; R2 = C1-30 divalent hydrocarbon or oxygen-containing hydrocarbon; R3 = C1-20 hydrocarbon or oxygen-containing hydrocarbon group; and a = 0 or 1); an amine compound described by the general formulas II and/or III (R4 = H or C1-5 alkyl; R5 = C1-15 hydrocarbon or oxygen-containing hydrocarbon; b = 0 or 1; R6 and R7 = the same or different and =

each H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; R8 = H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; Ar1 = C6-20 divalent aromatic hydrocarbon; R9 = H or C1-5 alkyl; R10 = C1-15 hydrocarbon or oxygen-containing hydrocarbon; c = 0 or 1; R11 and R12 = independently selected H or C1-20 hydrocarbon or oxygen-containing hydrocarbon; and R13 = H or C1-20 hydrocarbon or oxygen-containing hydrocarbon group); and a precursor component of a polymeric solid electrolyte, disposed between two elec. conductive substrates at least one of which is transparent. The ion conductive layer may addnl. incorporate an UV-absorbing compound having an ethylenic double bond.

IT 253588-79-3P

(electrochromic devices with cured ion conductive layers)

RN 253588-79-3 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

IC ICM C09K009-02 ICS G02F001-15

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 72, 74, 76

TT 71036-55-0P 99774-26-2P 163684-75-1P 232599-55-2P 253588-79-3P 265326-65-6P

(electrochromic devices with cured ion conductive layers)

FOD THIS DECORD ALL CITA

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L38 ANSWER 21 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

REFERENCE COUNT:

2000:274666 HCAPLUS

DOCUMENT NUMBER:

132:294893

TITLE:

Ultraviolet radiation-absorbing polyester

fluorescent lamp covering films Mori, Hiroshi; Akada, Mitsuo

PATENT ASSIGNEE(S):

Ohtsuka Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2000123622

A2 20000428 JP 1998-291130

1998

1013

< - -

PRIORITY APPLN. INFO.:

JP 1998-291130

1998

1013

The title films are prepared from copolyesters containing 0.01-50 mol%

AB bisbenzotriazol monomers (e.g., Ruva-100, Ruva-93), or from

polyester compns. containing 1.0-20% the copolyesters.

264284-61-9P IT

(UV-absorbing films; UV

radiation-absorbing polyester fluorescent lamp

covering films)

264284-61-9 HCAPLUS RN

1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with CN

1,2-ethanediol and 3,3'-methylenebis[5-(2H-benzotriazol-2-yl)-4-

hydroxybenzeneethanol] (9CI) (CA INDEX NAME)

CM 1

CRN 196516-61-7

C29 H26 N6 O4 CMF

CM 2

CRN 120-61-6

CMF C10 H10 O4

CM 3

CRN 107-21-1

CMF C2 H6 O2

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HO- CH2-CH2-OH
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IC ICM F21V009-06 ICS B32B027-18; C09K003-00

CC 38-3 (Plastics Fabrication and Uses) Section cross-reference(s): 42, 74

ST UV absorbing polyester fluorescent lamp covering film; bisbenzotriazol copolyester fluorescent lamp covering film

IT Fluorescent lamps
UV stabilizers

(UV radiation-absorbing polyester fluorescent lamp covering films)

IT Polyesters, uses

(UV radiation-absorbing polyester fluorescent lamp covering films)

IT Laminated plastics, uses

(UV radiation-absorbing polyester fluorescent lamp covering films)

IT Coating materials

(UV-absorbing; UV radiation-

absorbing polyester fluorescent lamp covering films)

IT Transparent materials Transparent materials

(adhesives; UV radiation-absorbing

polyester fluorescent lamp covering films)

IT Adhesives Adhesives

(transparent; **UV** radiation-absorbing polyester fluorescent lamp covering films)

IT 264284-62-0P

(UV-absorbing coatings; UV

radiation-absorbing polyester fluorescent lamp
covering films)

IT 264284-61-9P

(UV-absorbing films; UV

radiation-absorbing polyester fluorescent lamp covering films)

L38 ANSWER 22 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:260249 HCAPLUS

DOCUMENT NUMBER: 132:280628

TITLE: Bisbenzotriazolylphenol compounds, ultraviolet absorbers, ultraviolet-absorbing polymer, and

resin compositions and coating

materials containing them

INVENTOR(S): Daimon, Emiko; Mori, Koji; Akada, Mitsuo

PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000021937	A1	20000420	WO 1999-JP5525	

1999 1006

<--

W: US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

JP 2000119262 A2 20000425 JP 1998-291847

1998

1014

JP 3024960 B2 20000327

JP 3024960 B2 20000327 EP 1055669 A1 20001129 EP 1999-970384

1999

1006

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,

MC, PT, IE, FI

US 6414100 B1 20020702 US 2000-581162

2000

0613

PRIORITY APPLN. INFO.:

JP 1998-291847 A

1998

1014

WO 1999-JP5525

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<--

1999

1006

OTHER SOURCE(S):

MARPAT 132:280628

GI

Compds. I (A = CH2, CMe2, CEtMe; R1, R6 = H, C1-4 alkyl, aryl, C1-4 alkoxy, halo; R2, R4 = linear or branched C1-6 alkylene; R3, R5 = H, Me; l, m, n = 0, 1), useful for preparation of UV-absorbing coatings or as UV stabilizers, are prepared Thus, a composition containing Art Resin UN 3320HA (urethane acrylate oligomer) 4.0, pentaerythritol triacrylate 3.0, dipentaerythritol hexaacrylate 3.0, 2,2'-methylenebis[6-(2H-benzotriazole-2-yl)-4-(2-methacryloyloxyethyl)phenol] 0.3, and Darocur 1173 0.3 g was applied on a polycarbonate substrate, and irradiated by UV to give coatings showing good weather resistance.

263909-72-4P 263909-74-6P 263909-76-8P 263909-78-0P 263909-81-5P 263909-83-7P (bisbenzotriazolylphenol compds., UV absorbers, and UV-absorbing polymers for coatings)

RN 263909-72-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-63-3 CMF C37 H34 N6 O6

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me} & \text{C-C-OMe} \end{array}$$

RN 263909-74-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-5-[[3-(5-chloro-2H-benzotriazol-2-yl)-2-hydroxy-5-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]phenyl]methyl]-4-hydroxyphenyl]ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-65-5 CMF C37 H33 Cl N6 O6

CM 2

CRN 80-62-6 CMF C5 H8 O2

RN 263909-76-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-3,1-propanediyl] ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-67-7 CMF C39 H38 N6 O6

CM 2

CRN 80-62-6 CMF C5 H8 O2

RN 263909-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-70-2 CMF C35 H30 N6 O6

$$H_2C = CH - C - O - CH_2 - CH_2$$

OH

 N
 OH
 OH
 N
 OH
 N
 OH
 OH
 N
 OH
 OH
 N
 OH
 OH

CRN 80-62-6 CMF C5 H8 O2

$$H_2C$$
 O \parallel \parallel \parallel Me- C- C- OMe

RN 263909-81-5 HCAPLUS

2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Art Resin UN 3320HA, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-63-3 CMF C37 H34 N6 O6

CM 2

CRN 149531-40-8 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9 CMF C28 H34 O13

CM 4

CRN 3524-68-3 CMF C14 H18 O7

RN 263909-83-7 HCAPLUS

2-Propenoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester, polymer with Art Resin UN 3320HA, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 263909-70-2 CMF C35 H30 N6 O6

$$H_2C=:CH-C-O-CH_2-CH_2$$

OH

 OH
 OH

CM 2

CRN 149531-40-8 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9 CMF C28 H34 O13

CM 4

CRN 3524-68-3 CMF C14 H18 O7

IT 263909-63-3P 263909-65-5P 263909-67-7P 263909-70-2P

(bisbenzotriazolylphenol compds., UV absorbers, and UV-absorbing polymers for coatings)

RN 263909-63-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

RN 263909-65-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-5-[[3-(5-chloro-2H-benzotriazol-2-yl)-2-hydroxy-5-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]phenyl]methyl]-4-hydroxyphenyl]ethyl ester (9CI) (CA INDEX NAME)

RN 263909-67-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-3,1-propanediyl] ester (9CI) (CA INDEX NAME)

RN 263909-70-2 HCAPLUS

CN 2-Propenoic acid, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

$$H_2C = CH - C - O - CH_2 - CH_2$$

OH

 CH_2
 $CH_2 - CH_2 - O - C - CH = CH_2$

```
IC
     ICM C07D249-20
     ICS C09K003-00; C08K005-3475; C08F220-36; C08L033-14; C09D005-32
CC
     42-10 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 28, 37
ST
     benzotriazolylphenol methacrylate polymer uv
     absorber; weather resistance urethane acrylate polymer
     coating; polymerizable UV stabilizer benzotriazolylphenol
     methacrylate
IT
     Polyurethanes, uses
        (acrylates, polymers; bisbenzotriazolylphenol compds.,
        UV absorbers, and UV-
        absorbing polymers for coatings)
     UV stabilizers
IT
        (bisbenzotriazolylphenol compds., uv
        absorbers, and UV-absorbing
        polymers for coatings)
IT
     Coating materials
        (weather-resistant, UV-curable; bisbenzotriazolylphenol
        compds., UV absorbers, and UV-
        absorbing polymers for coatings)
     263909-72-4P 263909-74-6P 263909-76-8P
IT
     263909-78-0P 263909-81-5P 263909-83-7P
        (bisbenzotriazolylphenol compds., uv
        absorbers, and UV-absorbing
        polymers for coatings)
IT
     263909-48-4P
                    263909-53-1P
                                   263909-56-4P
                                                   263909-60-0P
     263909-63-3P 263909-65-5P 263909-67-7P
     263909-70-2P
        (bisbenzotriazolylphenol compds., uv
        absorbers, and UV-absorbing
        polymers for coatings)
IT
     9011-14-7, PMMA
        (bisbenzotriazolylphenol compds., uv
        absorbers, and UV-absorbing
        polymers for coatings)
IT
     96478-09-0
                  96478-11-4
                               96549-96-1
                                            170103-27-2
        (bisbenzotriazolylphenol compds., uv
        absorbers, and UV-absorbing
        polymers for coatings)
REFERENCE COUNT:
                               THERE ARE 9 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L38 ANSWER 23 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2000:252141 HCAPLUS
DOCUMENT NUMBER:
                         132:295248
TITLE:
                         Light-resistant water-thinned ink
                         compositions
INVENTOR(S):
                         Shida, Hiroki; Ito, Nobuyuki
PATENT ASSIGNEE(S):
                         JSR Co., Ltd., Japan
SOURCE:
                         Jpn. Kokai Tokkyo Koho, 19 pp.
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND DATE
                                            APPLICATION NO.
                                                                    DATE
                         ----
```

```
JP 2000109739
                                             JP 1998-286963
                         A2
                                 20000418
                                                                     1998
                                                                     1008
                                                < - -
PRIORITY APPLN. INFO.:
                                             JP 1998-286963
                                                                     1998
                                                                     1008
                                                <--
AB
     The ink compns. contain UV-absorbing
     polymers, pigments, and/or dyes. Thus, an aqueous dispersion containing
     copolymers of 2-(2-hydroxy-5-methacryloyloxyethylphenyl)-2H-
     benzotriazole (RUVA) 30, 1,2,2,6,6-pentamethyl-4-piperidyl
     methacrylate 1, methacrylic acid 30, and 2-ethylhexyl acrylate 39
     parts (neutralized with dimethylethanolamine) was prepared, which
     (15 parts) was mixed with C.I. Pigment Yellow 17 20, isopropanol
     5, and water 60 parts to give an ink showing good storage
     stability at 50° for 1 mo, and good resistance to UV
     irradiation for 100 h.
     264197-00-4P 264197-01-5P 264197-07-1P
IT
        (light-resistant storage-stable water-thinned ink
     264197-00-4 HCAPLUS
RN
CN
     2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-
     yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,2-ethanediyl
     bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate, ethyl
     2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, Latemul S
     180A, methyl 2-methyl-2-propenoate and 1,2,2,6,6-pentamethyl-4-
     piperidinyl 2-methyl-2-propenoate, compd. with
     2,2'-iminobis[ethanol] (9CI) (CA INDEX NAME)
     CM
          1
     CRN 111-42-2
     CMF C4 H11 N O2
HO- CH2- CH2- NH- CH2- CH2- OH
    CM
         2
    CRN 264196-99-8
         (C18 H17 N3 O3 . C14 H25 N O2 . C11 H20 O2 . C10 H14 O4 . C6
          \mbox{H10 O3} . C5 \mbox{H8 O2} . C5 \mbox{H8 O2} . C4 \mbox{H6 O2} . Unspecified)x
    CCI PMS
          CM
               3
          CRN
             113255-53-1
          CMF
              Unspecified
          CCI MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
         CM
               4
         CRN 96478-09-0
         CMF C18 H17 N3 O3
```

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--} \text{CH}_2\text{--} \text{O}\text{--} \text{C}\text{--} \text{C}\text{--} \text{Me} \end{array}$$

CRN 68548-08-3 CMF C14 H25 N O2

CM 6

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me-}$ $^{\rm C-}$ $^{\rm C-}$ $^{\rm O-}$ $^{\rm CH_2-}$ $^{\rm CH_2-}$ $^{\rm OH}$

CM 7

CRN 140-88-5 CMF C5 H8 O2

$$\begin{array}{c} \circ \\ || \\ \text{Eto-C-CH-----} \text{CH}_2 \end{array}$$

CM 8

CRN 103-11-7 CMF C11 H20 O2

CRN 97-90-5 CMF C10 H14 O4

CM 10

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ & \parallel & \parallel \\ {\rm Me-C-C-OMe} \end{array}$$

CM 11

CRN 79-41-4 CMF C4 H6 O2

RN 264197-01-5 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl
2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate),
ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl
2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide,
ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 263244-70-8
CMF (C18 H17 N3 O3 . C11 H20 O2 . C10 H14 O4 . C8 H8 . C7 H12 O2 . C6 H10 O3 . C4 H7 N O2 . C4 H6 O2)x
CCI PMS

CM 2

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 3

2

CRN 924-42-5 CMF C4 H7 N O2

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me^-}$ $^{\rm C^-}$ $^{\rm C^-}$ $^{\rm O^-}$ $^{\rm CH_2^-}$ $^{\rm CH_2^-}$ $^{\rm OH}$

CM 5

CRN 141-32-2 CMF C7 H12 O2

CM 6

CRN 103-11-7 CMF C11 H20 O2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

CM 8

CRN 97-90-5 CMF C10 H14 O4

CM 9

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-- C-- CO}_2\text{H} \end{array}$$

RN 264197-07-1 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, compd. with 2-(dimethylamino)ethanol (9CI) (CA INDEX NAME)

CM 1

CRN 108-01-0 CMF C4 H11 N O

 $Me_2N-CH_2-CH_2-OH$

CM 2

CRN 264197-06-0

CMF (C18 H17 N3 O3 . C10 H14 O4 . C6 H10 O3 . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 3

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\rm ||}$$
 $^{\rm O}_{\rm ||}$ $^{\rm ||}_{\rm ||}$ $^{\rm Me^-}$ $^{\rm C^-}$ $^{\rm C^-}$ $^{\rm O^-}$ $^{\rm CH_2^-}$ $^{\rm CH_2^-}$ $^{\rm OH}$

CM 5

CRN 140-88-5 CMF C5 H8 O2

CM 6

CRN 97-90-5 CMF C10 H14 O4

CM 7

```
CRN 80-62-6
CMF C5 H8 O2
```

```
H<sub>2</sub>C O
Me-C-C-OMe
```

CRN 79-41-4 CMF C4 H6 O2

```
CH<sub>2</sub>
Me-- C-- CO2H
```

IC ICM C09D011-10

ICS C08L027-12; C08L033-08; C08L083-04; C08L083-10; C09C003-10

CC 42-12 (Coatings, Inks, and Related Products)

ST UV absorbing polymer ink; methacryloyl

benzotriazole methacrylic acid ethylhexyl acrylate copolymer;

storage stability water thinned ink

IT Light-resistant materials Light-resistant materials

(inks; light-resistant storage-stable water-thinned ink compns.)

IT Inks

Inks

(light-resistant; light-resistant storage-stable water-thinned ink compns.)

IT Inks

> (water-thinned; light-resistant storage-stable water-thinned ink compns.)

IT 264196-98-7P 264197-00-4P 264197-01-5P

264197-03-7P 264197-05-9P **264197-07-1P** 264197-08-2P (light-resistant storage-stable water-thinned ink compns.)

L38 ANSWER 24 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:249877 HCAPLUS

DOCUMENT NUMBER: 132:280580

TITLE:

UV-shielding photocurable polymer compositions, their use in coating

materials, and moldings covered with them INVENTOR(S): Imai, Toshiyuki; Katayama, Shinichi; Mori,

Hiroshi; Akada, Mitsuo; Ishida, Koji

PATENT ASSIGNEE(S): Arakawa Chemical Industries, Ltd., Japan;

> Ohtsuka Chemical Co., Ltd. Jpn. Kokai Tokkyo Koho, 7 pp.

SOURCE:

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000109652	A2	20000418	JP 1998-280383	
				1998
				1001
	••		<	
PRIORITY APPLN. INFO.:			JP 1998-280383	
				1998
				1001
			<	

GI

RN

AΒ The compns. comprise thermally cured products of photocurable compns. containing polymers having (meth)acrylic equivalent 100-300 g/equiv, OH value 20-500, and weight-average mol. weight 5000-50,000, polyisocyanates, and I (R1, R2 = H, C1-10 alkyl; p, q = 4-8; m, n = 1-20). Thus, a mixture containing acrylic acid-glycidyl methacrylate-Me methacrylate copolymer (acrylic equivalent 270 g/equiv, OH value 204, Mw 18,000), I (R1, R2 = H; p, q = 5; prepared by polymerization of caprolactone in the presence of 2,2'-methylenebis[6-(2H-1,2,3-benzotriazole-2-yl)-4-(2hydroxyethyl)phenol]), Coronate HX (1,6-hexane diisocyanate trimer), and a photopolymn. initiator was applied on an acrylic resin sheet, heated, and UV-cured to give a sheet with coatings showing high surface hardness and weather resistance. IT 214746-68-6P

Ι

(UV-shielding photocurable resin compns. for abrasion-, chemical, weather- and crack-resistant coatings) 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-(CH2)5 - OH$$

IT 263904-11-6P

(UV-shielding photocurable resin compns. for abrasion-, chemical, weather- and crack-resistant coatings)

RN263904-11-6 HCAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with Coronate CN HX, α, α' - [methylenebis [[5-(2H-benzotriazol-2-yl)-4hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A

OH

OH

$$CH_2$$
 CH_2
 CH_2

PAGE 1-B

CM 2

CRN 144245-98-7 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 106-91-2 CMF C7 H10 O3

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-} & \text{C--} & \text{C--} & \text{OMe} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

$$^{
m O}_{||}$$

IC ICM C08L063-10 ICS C08G018-58; C08G018-62; C08L075-04; C09K003-00

USHA SHRESTHA EIC 1700 REM 4B28

```
CC
     42-7 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 38
ST
     UV absorbent bisbenzotriazolylphenol polyester
     coating molding; acrylic polyurethane coating UV
     absorbent bisbenzotriazolylphenol; polyisocyanate acrylic
     polymer UV absorbent coating;
     methylenebisbenzotriazolylhydroxytrioxotrioxatricosylphenol
     UV absorbent coating; abrasion resistance
     coating acrylic polyester polyurethane; weather resistance coating
     acrylic polyester polyurethane; crack resistance coating acrylic
     polyester polyurethane; scratch resistance coating acrylic
     polyester polyurethane; chem resistance coating acrylic polyester
     polyurethane; methyl methacrylate polymer UV curable coating;
     glycidyl methacrylate polymer UV curable coating; hexane
     diisocyanate trimer UV curable coating
IT
     Coating materials
        (UV-absorbing; UV-shielding
        photocurable resin compns. for abrasion-, chemical,
        weather- and crack-resistant coatings)
IT
     Coating materials
        (UV-curable; UV-shielding photocurable resin compns.
        for abrasion-, chemical, weather- and crack-resistant coatings)
IT
     UV stabilizers
        (UV-shielding photocurable resin compns. for
        abrasion-, chemical, weather- and crack-resistant coatings)
     Molded plastics, uses
IT
        (UV-shielding photocurable resin compns. for
        abrasion-, chemical, weather- and crack-resistant coatings)
IT
     Polyurethanes, uses
     Polyurethanes, uses
     Polyurethanes, uses
        (acrylic-epoxy-polyester-; UV-shielding photocurable resin
        compns. for abrasion-, chemical, weather- and
        crack-resistant coatings)
     Polyesters, uses
IT
     Polyesters, uses
     Polyesters, uses
        (acrylic-epoxy-polyurethane-; UV-shielding photocurable resin
        compns. for abrasion-, chemical, weather- and
        crack-resistant coatings)
IT
     Epoxy resins, uses
     Epoxy resins, uses
     Epoxy resins, uses
        (acrylic-polyester-polyurethane-; UV-shielding photocurable
        resin compns. for abrasion-, chemical, weather- and
        crack-resistant coatings)
IT
     Coating materials
        (weather-resistant; UV-shielding photocurable resin
        compns. for abrasion-, chemical, weather- and
        crack-resistant coatings)
IT
     214746-68-6P
        (UV-shielding photocurable resin compns. for
        abrasion-, chemical, weather- and crack-resistant coatings)
IT
     263904-11-6P
        (UV-shielding photocurable resin compns. for
        abrasion-, chemical, weather- and crack-resistant coatings)
IT
     196516-61-7, RUVA 100
        (UV-shielding photocurable resin compns. for
        abrasion-, chemical, weather- and crack-resistant coatings)
```

L38 ANSWER 25 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:241090 HCAPLUS DOCUMENT NUMBER: 132:280643

TITLE: Transfer sheets for protecting molded articles

and UV absorbents for use

in the sheets

INVENTOR(S):

Nakamura, Yuzo

PATENT ASSIGNEE(S):

Nissha Printing Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE	
WO 2000020228	A1	20000413	WO 1999-JP5314	1999 0929	
			<		
W: CA, CN, KR, RW: AT, BE, CH, MC, NL, PT,	CY, DE		FI, FR, GB, GR, IE, IT,	LU,	
JP 2000109682		20000418	JP 1998-296212		
		•		1998 1001	
JP 3585748	B2	20041104	<		
	A2		JP 1998-296213		
				1998 1001	
JP 3514640	В2	20040331	<		
CA 2345361	AA				
				1999 0929	
EP 1125764	A1	20010022	<		
Bt 1125704	AI	20010822	EP 1999-970058	1999 0929	
			<		
MC, PT, IE,	FI		GB, GR, IT, LI, LU, NL,	SE,	
US 6527898	B1	20030304	US 2001-787552	2001	
				2001 0320	
			<		
PRIORITY APPLN. INFO.:			JP 1998-296212	A 1998	
			<	1001	
			JP 1998-296213	A 1998	
				1001	
			< WO 1999-JP5314	W	
			#O 1999-089314	1999 0929	

USHA SHRESTHA EIC 1700 REM 4B28

<--

OTHER SOURCE(S):

MARPAT 132:280643

AB The transfer sheets comprise a releasable base sheet and a protective layer derived from a composition containing radiation-curable polymers having a (meth)acrylic equivalent of 100 to 300 g/equiv, a hydroxyl value of 20 to 500, and a weight-average mol. weight of 5,000 to 50,000, a polyfunctional isocyanate, and a **uv** absorber of bisbenzotriazole-type compds. for preventing their bleeding from resins. Thus, coating a composition containing the curable varnish of a glycidyl methacrylate-Me methacrylate copolymer in acrylic acid, 100, Coronate HX 5, Irgacure 184 (photoinitiator) 5 and RUVA-100 {2,2'-methylenebis[6-(2H-1,2,3-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol]}- ε caprolactone adduct 10 parts on the release surface of a melamine resin release-coated PET polyester film to a pickup thickness of 5 μm, heating at 150° for 20 s and printing on top with designs using an acrylic ink gave a transfer which adhered to an acrylic molding surface without wrinkle and could be cured with UV light.

IT 250252-46-1P

(UV-light stabilizer; transfer sheets for protecting molded articles and UV absorbents for use in protective layer)

RN 250252-46-1 HCAPLUS

CN Hexanoic acid, 6-[[6-[(6-hydroxy-1-oxohexyl)oxy]-1-oxohexyl]oxy]-, methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl] ester (9CI) (CA INDEX NAME)

PAGE 1-B

IC ICM B44C001-17

ICS C08L075-04; C08K005-3475; C08G018-62; C09K003-00; B29C045-14

CC 42-11 (Coatings, Inks, and Related Products)

IT Acrylic polymers, uses

Polyesters, uses

(substrate; transfer sheets for protecting molded articles and

UV absorbents for use in protective layer)

IT Transfers

UV stabilizers

(transfer sheets for protecting molded articles and uv absorbents for use in protective layer)

IT 947-19-3, Irgacure 184

> (UV-light co-stabilizer; transfer sheets for protecting molded articles and UV absorbents for use in protective layer)

IT250252-46-1P

> (UV-light stabilizer; transfer sheets for protecting molded articles and UV absorbents for use in protective layer)

204701-37-1, Acrylic acid-Coronate HX-glycidyl methacrylate-methyl IT methacrylate copolymer

> (protective layer; transfer sheets for protecting molded articles and UV absorbents for use in protective layer)

25038-59-9, PET polyester, uses IT

> (substrate; transfer sheets for protecting molded articles and UV absorbents for use in protective layer)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 26 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:216114 HCAPLUS

DOCUMENT NUMBER: 132:252153

TITLE: Pressure-sensitive adhesive sheets with

> excellent weather resistance Mori, Koji; Akada, Mitsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan SOURCE:

Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000096032	A2	20000404	JP 1998-269883	
				1998
				0924
			<	
JP 3046007	B2	20000529		
PRIORITY APPLN. INFO.:			JP 1998-269883	
				1998
				0924

MARPAT 132:252153

< - -OTHER SOURCE(S):

GI

I

The adhesive sheets consist of a fluoro resin film and AB pressure-sensitive adhesive layer(s) formed from compns. based on acrylic, vinyl acetate-, EVA-, polyurethane-, SBR-, natural rubber-, isoprene rubber-, NBR-, and/or silicone-based adhesive resins and bis(benzotriazolyl)phenols I [A = direct link, CH2, C2-6 linear or branched alkylene, O, NH; R3, R4 = H, C1-4 alkyl, aryl, C1-4 alkoxy, halo; R1, R2 = R50[CO(CR6R7)nO]mH; R5 = direct link, C1-12 linear or branched alkylene; R6, R7 = H, C1-10 alkyl; m = 1-20; n = 4-8]. Thus, 129.3 g Ruva 100 was treated with 170.3 g ε-caprolactone to give 98% product, which was added 1% to an acrylic adhesive (2-ethylhexyl acrylate-Bu acrylate-vinyl acetate-styrene-Me methacrylate-acrylic acid-methacrylic acid-2-hydroxyethyl methacrylate copolymer in PhMe), then the adhesive composition was blended with Coronate L, made into a film, and laminated on a fluoropolymer film to give an adhesive sheet showing good adhesion to a PMMA plate even after weathering.

IT 262847-61-0P

RN

CN

(pressure-sensitive adhesive sheets containing bis(benzotriazolyl)phenol compds. with good weather resistance)
262847-61-0 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, Coronate L, ethenyl acetate, ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]], methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6 CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 CCI PMS

PAGE 1-A

HO —
$$\begin{pmatrix} CH_2 \end{pmatrix}_5 - C - O \end{pmatrix}_n$$
 $CH_2 - CH_2$ $CH_2 - CH_2$ $CH_2 - CH_2$

PAGE 1-B

--
$$(CH_2)_5$$
 OH

CM 2

CRN 39278-79-0 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 868-77-9 CMF C6 H10 O3

$$^{\rm H_2C}_{\parallel}$$
 $^{\rm O}_{\parallel}$ $^{\rm Me^{--}\,C^{--}\,C^{--}\,C^{--}\,C^{+}_2^{--}\,C^{+}_2^{--}\,O^{+}}$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CRN 108-05-4 CMF C4 H6 O2

Aco-CH-CH₂

CM 6

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \text{CH}_2-\text{O-C-CH----} \text{CH}_2 \\ | \\ \text{Et-CH--- Bu-n} \end{array}$$

CM 7

CRN 100-42-5 CMF C8 H8

H₂C---- CH-- Ph

CM 8

CRN 80-62-6 CMF C5 H8 O2

CM 9

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ \parallel \\ \text{Me--C--CO}_2\text{H} \end{array}$$

CM 10

CRN 79-10-7 CMF C3 H4 O2

IT 214746-68-6P

(pressure-sensitive adhesive sheets containing bis (benzotriazolyl) phenol compds. with good weather resistance)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

OH

$$CH_2$$
 CH_2
 CH_2

PAGE 1-B

$$-(CH2)5 - OH$$

IC ICM C09J201-00

ICS C09J007-02; C09J011-06; C07D249-20; C09K003-00

CC 38-3 (Plastics Fabrication and Uses)

ST benzotriazolylphenol polycaprolactone UV absorber adhesive sheet

IT 262847-61-0P

(pressure-sensitive adhesive sheets containing

bis(benzotriazolyl)phenol compds. with good weather resistance)

IT 214746-68-6P 215232-60-3P

(pressure-sensitive adhesive sheets containing bis(benzotriazolyl)phenol compds. with good weather resistance)

L38 ANSWER 27 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2000:216029 HCAPLUS

DOCUMENT NUMBER: 132:251904

TITLE: Benzotriazole group-containing polyesters with

good compatibility to resins, their

manufacture, **UV** absorbers, and chemically resistant resin **compositions** containing them

INVENTOR(S): Endo, Toshiro; Isobe, Tomohisa; Okumura,

Koichi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 200095849	A2	20000404	JP 1998-265877	
				1998 0921
KR 2000013679	Α	20000306	< KR 1998-32674	1998
			<	0812
PRIORITY APPLN. INFO.:			JP 1998-265877 A	1998 0921

<--

$$Q = \begin{pmatrix} R^2 & & \\$$

QR30[CO(CR4R5) nO] mH or H[O(CR4R5) nCO] mQ'[CO(CR4R5) pO] qH [Q = I; Q' = 3,3'-methylenebis[5-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol] residue or its derivs.; R1 = H, halo, C1-10-alkyl; R2, R4, R5 = H, C1-10-alkyl; R3 = C1-10-alkylene; n, p = 4-8; m, q = 1-20] are manufactured by ring-opening polymerization of lactones with the corresponding benzotriazole-containing alcs. Thus, 100 parts polypropylene was mixed with 2 parts polyester prepared from 342 g ε-caprolactone and 134.5 g JF 269
[3-(2H-benzotriazol-2-yl)-4-hydroxybenzeneethanol] and injection-molded to give a dumbbell test piece, showing no change in tensile breaking elongation during a 2000-h exposure test.

IT 214746-68-6P

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-B

IC ICM C08G063-685

ICS C09K003-00; C07D249-20

- CC 37-6 (Plastics Manufacture and Processing)
- ST benzotriazole caprolactone polyester **UV absorber** ; chem resistance benzotriazolylhydroxybenzeneethanol polycaprolactone; light resistance polypropylene benzotriazole polyester blend
- IT Chemically resistant materials

UV stabilizers

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

IT Polycarbonates, properties

Polyesters, properties

Polyesters, properties

Polyolefins

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

IT Polyamides, uses

Polyurethanes, uses

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

IT Polyesters, preparation

(hydroxy-terminated; benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

IT 214746-68-6P 215094-32-9P 215232-60-3P 215437-97-1P (benzotriazole group-containing polyograps for shoring)

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

IIght-resistant resin compns.)
IT 9002-85-1. Poly(vinylidene chlori

9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl chloride) 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-butadiene-styrene copolymer 9011-14-7, Poly(methyl methacrylate) 25038-59-9, Poly(ethylene

terephthalate), properties

(benzotriazole group-containing polyesters for chemical and light-resistant resin compns.)

L38 ANSWER 28 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:168138 HCAPLUS

DOCUMENT NUMBER: 132:223375

TITLE: Benzotriazole group-containing polyester

UV absorbents

INVENTOR(S): Okumura, Koichi; Endo, Toshio; Isobe, Tomohisa

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: U.S., 20 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
US 6037393	Α	20000314	US 1998-164665	
				1998
				1001
			<	
CN 1246476	A	20000308	CN 1998-118816	
				1998
				0827
			<	
CN 1125820	В	20031029		
EP 989124	A1	20000329	EP 1998-402368	
				1998
				0925
			<	
EP 989124	B1	20020814		
			B, GR, IT, LI, LU, NL,	SE,
MC, PT, IE	r, 21, F.	r, LV, FI, R	J	

PRIORITY APPLN. INFO.: US 1998-164665

> 1998 1001

Α

AB Polyester compds. having a benzotriazole group are obtained by a ring-opening addition-polymerization of lactones with the alc. hydroxyl group of 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxy-benzene -propanol, 3-(2H-benzotriazol-2-yl)-4-hydroxybenzene-ethanol, 3-(5-methyl-2H-benzotriazol-2-yl)-5-(1-methylethyl) -4-hydroxy-benzene-propanolbis[3-(2H-benzotriazol-2-yl)-4hydroxy-benzene-ethanol]methane or the like. These compds. are used as UV absorbents for thermoplastic resins. The resulting resin composition has an excellent light resistance and chemical resistance. IT214746-68-6P

< - -

(UV absorbent; benzotriazole group-containing polyester **UV** absorbents)

214746-68-6 HCAPLUS RN

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A

HO
$$CH_2$$
 CH_2 CH_2

PAGE 1-B

IC ICM C08K005-34

ICS C07D249-16

INCL 524091000

CC 37-6 (Plastics Manufacture and Processing)

ST benzotriazole group polyester UV absorbent

IT UV stabilizers

(benzotriazole group-containing polyester **uv** absorbents)

IT Acrylic polymers, properties

Polyamides, properties

Polycarbonates, properties

Polyesters, properties

Polyolefins

(benzotriazole group-containing polyester **uv** absorbents)

IT Polyesters, preparation

(benzotriazole group-containing, UV absorbent; benzotriazole group-containing polyester UV absorbents)

IT Polyurethanes, properties

(thermoplastic; benzotriazole group-containing polyester **uv** absorbents)

IT 214746-68-6P 215094-32-9P 215232-60-3P 215437-97-1P (UV absorbent; benzotriazole group-containing polyester UV absorbents)

9002-85-1, Polyvinylidene-chloride 9002-86-2, Polyvinyl-chloride 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-butadiene-styrene resin 9011-14-7, Poly(methyl methacrylate 25038-59-9, Polyethylene terephthalate, properties (benzotriazole group-containing polyester UV absorbents)

L38 ANSWER 29 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:129776 HCAPLUS

DOCUMENT NUMBER:

132:174596

TITLE:

Polymer solid electrolyte and electrochromic

device using it

INVENTOR(S):

Nishikitani, Yoshinori; Kobayashi, Masaaki;

Imafuku, Hiroshi

PATENT ASSIGNEE(S):

Nisseki Mitsubishi K. K., Japan Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

FAMILY ACC. NUM. COUNT:

Japanese

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000057844	A2	20000225	JP 1998-221903	1000
				1998 0805
			<	
PRIORITY APPLN. INFO.:			JP 1998-221903	
				1998
				0805

AB The electrolyte is manufactured by curing a composition containing (A) a ethylenic double bond-containing polymerizable **vv** absorber and (B) a polymer solid electrolyte precursor containing a polymerizable monomer and a supporting electrolytic substance. The device is equipped with an electrolytic layer comprising the electrolyte. The electrolyte shows UV absorbing characteristic, high ionic conductivity, and excellent light resistance.

253588-79-3P IT

> (polymer solid electrolyte containing UV absorber for electrochromic device)

RN 253588-79-3 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

IC ICM H01B001-12 ICS G02F001-15

CC 76-10 (Electric Phenomena) Section cross-reference(s): 38

ST ethylenic polymer solid electrolyte electrochromic device; UV absorber solid polymer electrolyte; ionic

conductor ethylenic crosslinking polymer electrolyte
IT Electrochromic devices
Polymer electrolytes
UV stabilizers

(polymer solid electrolyte containing UV absorber for electrochromic device)

IT 25852-47-5, Polyethyleneglycol dimethacrylate (9G; polymer solid electrolyte containing UV absorber for electrochromic device)

IT 26915-72-0, M 40G

(M 40G; polymer solid electrolyte containing UV absorber for electrochromic device)

IT 32171-39-4, NK Ester AM 40G

(NK Ester AM 40G; polymer solid electrolyte containing UV absorber for electrochromic device)

IT 106-91-2P, Glycidyl methacrylate

(polymer solid electrolyte containing **UV absorber** for electrochromic device)

IT 253588-79-3P

(polymer solid electrolyte containing **uv** absorber for electrochromic device)

IT 83573-67-5

(polymer solid electrolyte containing **UV** absorber for electrochromic device)

L38 ANSWER 30 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:120904 HCAPLUS

DOCUMENT NUMBER: 132:167754

TITLE: UV-absorbing polymers and

their weather-resistant compositions

INVENTOR(S): Kono, Kazuhiro; Mori, Hiroshi; Akada, Mitsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000053754	A2	20000222	JP 1999-157136	
				1999 0603
			<	0003
JP 3048573	B2	20000605		
PRIORITY APPLN. INFO.:			JP 1998-154952 A	
				1998
				0603

<--

II

Title polymers having viscosity-average mol. weight (Mv) 5000-100,000, and useful for coatings, etc., comprise 0.01-70% I (A = direct bond, C1-6 alkylene, O, NH, S, SO, SO2; R1, R2 = H, C1-4 alkyl, aryl, C1-4 alkoxy, halo; R3, R6 = direct bond, C1-12 alkylene; R4, R5, R7, R8 = H, C1-10 alkyl; m, p = 1-20; n, q = 1-10) units and II (B = C1-10 alkylene, O, CO, NH, S, SO, SO2; R9-R12 = H, halo, C1-4 alkyl or alkoxy) units. Thus, reacting 129.3 g 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol] (RUVA 100) with 170.3 g caprolactone gave a diol (Mw 1688), which (0.356 g) was polymerized with 1.72 g bisphenol A and 2.08 g triphosgene to give a polymer with Mv 25,100, yellow index difference (ΔΥΙ) 0.2 after 1200 h under sunshine weatherometer and retention of absorbance 98.8% after 40 h at 70° in H2O.

IT 259105-43-6P 259105-45-8P 259105-46-9P 259105-47-0P

(UV-absorbing polymers and weather-resistant coatings)

RN 259105-43-6 HCAPLUS

Phenol, 4,4'-(1-methylethylidene)bis-, polymer with
bis(trichloromethyl) carbonate and α,α'[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] (9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6 CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 CCI PMS

PAGE 1-A

PAGE 1-B

CM 2

CRN 32315-10-9 CMF C3 C16 O3

CM 3

CRN 80-05-7 CMF C15 H16 O2

RN 259105-45-8 HCAPLUS

CN Carbonic acid, polymer with α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]] and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-B

CM 2

CRN 463-79-6 CMF C H2 O3

CM 3

CRN 80-05-7 CMF C15 H16 O2

RN 259105-46-9 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, dimethyl ester, polymer with
1,2-ethanediol and α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]
(9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6

CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4

CCI PMS

PAGE 1-A

OH

OH

$$CH_2$$
 CH_2
 CH_2

PAGE 1-B

$$- (CH2)5 - OH$$

CM 2

CRN 120-61-6 CMF C10 H10 O4

CM 3

CRN 107-21-1 CMF C2 H6 O2

 ${\tt HO-CH_2-CH_2-OH}$

RN 259105-47-0 HCAPLUS
CN 1,2-Ethanediol, polymer with α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxypoly[oxy(1-oxo-1,6-hexanediyl)]]
and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 214746-68-6 CMF (C6 H10 O2)n (C6 H10 O2)n C29 H26 N6 O4 CCI PMS

PAGE 1-A

OH

OH

N

OH

N

OH CH_2 CH_2

PAGE 1-B

$$-(CH2)5 - OH$$

CM 2

CRN 107-21-1 CMF C2 H6 O2

 ${\tt HO-CH_2-CH_2-OH}$

CM 3

CRN 101-68-8 CMF C15 H10 N2 O2

IT 214746-68-6P

(UV-absorbing polymers and weather-resistant coatings)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-ethanediyl]]bis[ω-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-B

$$- (CH2)5 - OH$$

IC ICM C08G063-685

CCS C08G018-46; C08G064-12; C08L067-02; C08L069-00; C08L075-04; C07D249-20

CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 37

ST **UV absorbing** benztriazole polymer; benzotriazole polyester polycarbonate; we

benzotriazole polyester polycarbonate; weather resistant benztriazole polycarbonate coating

IT Polyesters, uses

(UV-absorbing polymers and weather-resistant coatings)

IT Coating materials

(UV-absorbing; UV-

absorbing polymers and weather-resistant coatings)

IT Polyesters, uses Polyesters, uses

(polycarbonate-; **UV-absorbing** polymers and

weather-resistant coatings)

Polycarbonates, uses IT Polycarbonates, uses Polyurethanes, uses

(polyester-; UV-absorbing polymers and

weather-resistant coatings)

IT Coating materials

(weather-resistant; UV-absorbing polymers

and weather-resistant coatings)

259105-43-6P 259105-45-8P 259105-46-9P IT

259105-47-0P

(UV-absorbing polymers and weather-resistant coatings)

214746-68-6P IT

> (UV-absorbing polymers and weather-resistant coatings)

196516-61-7, RUVA 100 IT 502-44-3, 2-Oxepanone

> (UV-absorbing polymers and weather-resistant coatings)

L38 ANSWER 31 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

2000:116788 HCAPLUS ACCESSION NUMBER:

132:153375 DOCUMENT NUMBER:

TITLE:

weather- and water-resistant paint compositions for roofs and exterior

walls of constructions

Yanauchi, Kazuo; Yamazaki, Takayoshi INVENTOR(S): Taisei Chemical Industries Ltd., Japan PATENT ASSIGNEE(S):

SOURCE:

Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 979836	A1	20000216	EP 1999-306297	1999 0810
			<	0010
EP 979836	B1	20041215		
R: AT, BE, CH,	DE, DK		B, GR, IT, LI, LU, N	L, SE,
JP 2000053913	-	· ·		
01 2000033713	n _L	20000222	01 1990 220110	1998
				0811
			<	
JP 3059704	B2	20000704		
US 6248828	B1	20010619	US 1999-369122	
				1999
				0805
			<	
AT 284909	E	20050115	AT 1999-306297	
				1999

0810

PRIORITY APPLN. INFO.:

JP 1998-226446

1998

0811

< - -

<--

GI

$$R^{2}$$
 I R^{4} R^{5} II

AB Title composition comprises (A) an isocyanate blend containing (a) an isocyanate compound having functional group with UV absorbability on a side chain and a residual isocyanate group, and prepared by reacting an isocyanate prepolymer or monomer having at least two free isocyanate groups (e.g., hexamethylene diisocyanate isocyanurate) with an UV absorber I and II (R1, R2, R4, R5 = H, C1-10 hydrocarbyl, C1-10 alkoxy; R3 = H, halogen, C1-10 alkoxy, cyano, nitro; e.g., 2-(2'-hydroxy-5'-methylphenyl)benzotriazole) and (b) an isocyanate prepolymer (different from A; e.g., Acrit 8XA-012), and (B) an active hydrogen-containing polymer (e.g., hydroxy-containing acrylic polymer prepared from cyclohexyl methacrylate, Me methacrylate, Bu acrylate, 2-hydroxyethyl methacrylate, acrylic acid, 2-[2'-hydroxy-5'-(methacryloyloxyethyl)phenyl]benzotriazole, methacryloylamino-2,2,6,6-tetramethyl piperidine, dimethylaminoethyl methacrylate-glycidyl methacrylate copolymer and 2-methacryloyloxyethyl phthalate-glycidyl methacrylate copolymer).

257299-67-5DP, polymers with hydroxy benzotriazole- or benzophenone-containing isocyanate compds. and isocyanate prepolymer (weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

RN 257299-67-5 HCAPLUS

1,2-Benzenedicarboxylic acid, bis[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, cyclohexyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, 2-methyl-N-(2,2,6,6-tetramethyl-4-piperidinyl)-2-propenamide, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CN

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CRN 31582-46-4 CMF C13 H24 N2 O

CM 3

CRN 10552-43-9 CMF C20 H22 O8

CM 4

CRN 2867-47-2 CMF C8 H15 N O2

CM 5

CRN 868-77-9 CMF C6 H10 O3

CM 6

CRN 141-32-2 CMF C7 H12 O2

CM 7

CRN 106-91-2 CMF C7 H10 O3

CM 8

CRN 101-43-9 CMF C10 H16 O2

CM S

CRN 80-62-6 CMF C5 H8 O2

```
CM 10

CRN 79-10-7

CMF C3 H4 O2
```

0 || HO- C- CH--- CH₂

IC ICM C08G018-78 ICS C08G018-80

CC 42-10 (Coatings, Inks, and Related Products) Section cross-reference(s): 58

ST polyurethane acrylic paint weather resistance construction;

UV absorbability polyurethane coating water

resistance

IT Polyurethanes, uses

(acrylic; weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

IT Polyoxyalkylenes, uses

(triol, polymers with polyisocyanates; weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

IT Coating materials

(water- and weather-resistant; weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

IT Construction materials

Paints

(weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

IT Polyurethanes, uses

(weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

822-06-0DP, HMDI, reaction products with hydroxy-containing IT benzotriazole or benzophenone, polymers with acrylic polyols 1843-05-6DP, 2-Hydroxy-4-n-octoxybenzophenone, reaction products with polyisocyanates, polymers with acrylic polyols 2440-22-4DP, 2-(2'-Hydroxy-5'-methylphenyl)benzotriazole, reaction products with polyisocyanates, polymers with acrylic polyols Hexamethylene diisocyanate isocyanurate, reaction products with hydroxy-containing benzotriazole or benzophenone, polymers with 4035-89-6DP, HMDI biuret, reaction products with acrylic polyols hydroxy-containing benzotriazole or benzophenone, polymers with acrylic polyols 25322-68-3DP, Polyethylene glycol, triol, polymers with polyisocyanates 50886-64-1DP, reaction products with hydroxy-containing benzotriazole or benzophenone, polymers with acrylic polyols 257299-67-5DP, polymers with hydroxy benzotriazole- or benzophenone-containing isocyanate compds. and 257947-03-8DP, Acrit 8XA012, polymers with isocyanate prepolymer acrylic polyols

(weather- and water-resistant paint compns. for roofs and exterior walls of constructions)

5

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 32 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

132:79777

ACCESSION NUMBER:

2000:23319 HCAPLUS

DOCUMENT NUMBER: TITLE:

Metallic finishing method for metal- or

plastic-made automobile bodies

INVENTOR(S):

Nakamura, Shigeru; Nakao, Yasushi

PATENT ASSIGNEE(S): SOURCE:

Kansai Paint Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 200005695	A2	20000111	JP 1998-181805	1998 0629
PRIORITY APPLN. INFO.:			< JP 1998-181805	1998 0629

Title method involves (a) coating metallic coatings containing AB colorant-colored Al flakes further coated with light stabilizerand/or UB absorber-containing resins and (b) finishing with clear The Colofine red 236A-colored Alpaste 725N flakes were coated with a solution containing acrylic acid-2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole-2,2,6,6-tetramethyl-4piperidyl methacrylate-trimethylolpropane trimethacrylate copolymer and mixed with a OH-containing acrylic resin and melamine resin to form a metallic composition, which was sprayed on a polyester middle composition-coated and epoxy resin-deposited phosphated steel panel, deposited with Luga bake clear, and baked to form a panel showing color deviation of 1.4 after 1,200 h under weatherometer.

247579-96-0P 247579-97-1P, Acrylic IT acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole-2,2,6,6-tetramethyl-4piperidyl methacrylate copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'methacryloxyethylphenyl) -2H-benzotriazole-1,2,2,6,6-pentamethyl-4piperidyl methacrylate copolymer

(light stabilizer/UV absorber-containing resin-coated colored Al flake-containing metallic coatings in

finishing method for discoloration prevention) 247579-96-0 HCAPLUS RN

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-CN propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-97-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-

piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--} \text{CH}_2\text{--} \text{O}\text{--} \text{C}\text{--} \text{Me} \end{array}$$

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

$$H_2C = CH - C - O - (CH_2)_6 - O - C - CH = CH_2$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-98-2 HCAPLUS CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-

USHA SHRESTHA EIC 1700 REM 4B28

hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 68548-08-3 CMF C14 H25 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

CM 4

CRN 79-10-7 CMF C3 H4 O2

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IC
    ICM B05D005-06
    ICS B05D001-36; B05D007-14; C08F020-34; C08F026-06; C09C001-64;
     42-7 (Coatings, Inks, and Related Products)
CC
    light stabilizer UV absorber polymer coated
ST
     colored aluminum pigment; finishing method metallic coating
    modified aluminum flake; automobile body finishing method metallic
    coating
IT
    Metals, miscellaneous
    Molded plastics, miscellaneous
        (automobile bodies; light stabilizer/UV
        absorber-containing resin-coated colored Al flake-containing
        metallic coatings in finishing method for discoloration
       prevention)
    Automobiles
IT
        (bodies; light stabilizer/UV absorber
        -containing resin-coated colored Al flake-containing metallic coatings
        in finishing method for discoloration prevention)
IT
    Aminoplasts
        (in metallic coating; light stabilizer/UV
        absorber-containing resin-coated colored Al flake-containing
        metallic coatings in finishing method for discoloration
        prevention)
     Discoloration prevention
IT
     Pigments, nonbiological
        (light stabilizer/UV absorber-containing
        resin-coated colored Al flake-containing metallic coatings in
        finishing method for discoloration prevention)
     Acrylic polymers, uses
IT
        (light stabilizer/UV absorber-containing
        resin-coated colored Al flake-containing metallic coatings in
        finishing method for discoloration prevention)
IT
     Coating materials
        (weather-resistant; light stabilizer/UV)
        absorber-containing resin-coated colored Al flake-containing
        metallic coatings in finishing method for discoloration
        prevention)
IT
     66105-72-4, Luga bake clear
        (clear coating; light stabilizer/UV absorber
        -containing resin-coated colored Al flake-containing metallic coatings
        in finishing method for discoloration prevention)
     9003-08-1, Melamine resin
IT
        (in metallic coating; light stabilizer/UV
        absorber-containing resin-coated colored Al flake-containing
        metallic coatings in finishing method for discoloration
        prevention)
     247579-96-0P 247579-97-1P, Acrylic
IT
     acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-
     methacryloxyethylphenyl) -2H-benzotriazole-2,2,6,6-tetramethyl-4-
     piperidyl methacrylate copolymer 247579-98-2P, Acrylic
     acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-
     methacryloxyethylphenyl) -2H-benzotriazole-1,2,2,6,6-pentamethyl-4-
     piperidyl methacrylate copolymer
        (light stabilizer/UV absorber-containing
        resin-coated colored Al flake-containing metallic coatings in
        finishing method for discoloration prevention)
IT
     147-14-8, Heliogen blue L 6900
                                      130213-50-2, Colofine red 236A
        (light stabilizer/UV absorber-containing
        resin-coated colored Al flake-containing metallic coatings in
        finishing method for discoloration prevention)
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IT 7429-90-5, Alpaste 725N, uses
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(light stabilizer/UV absorber-containing

resin-coated colored Al flake-containing metallic coatings in finishing method for discoloration prevention)

L38 ANSWER 33 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:801357 HCAPLUS

DOCUMENT NUMBER: 132:37003

TITLE: Formation of multilayered coating films with

weather resistance for automobile panels

INVENTOR(S): Nakamura, Shigeru; Nakao, Yasushi

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
·				
JP 11347489	A2	19991221	JP 1998-163402	1998
				0611
			<	0011
PRIORITY APPLN. INFO.:			JP 1998-163402	
				1998
				0611

<--

Title formation involves coating with colored coatings, metallic coatings containing Al flakes pre-treated with pigments and UV absorber- and/or light stabilizer-containing resins, and clear coatings. A substrate was coated with a colored composition containing melamine resin (I) and OH-containing an acrylic resin (A), then with a composition containing A, I, and Al flakes pre-treated with Colofine red 236A and acrylic acid-trimethylolpropane ttrimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer, and a Luga Bake clear to form a product showing color deviation 1.5 after 1,200 h under sunshine weatherometer.

IT 247579-96-0P, Acrylic acid-trimethylolpropane

trimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer

(UV absorber/light stabilizer-containing resinant and colorant-treated Al flake metallic coatings in formation of multilayer films)

RN 247579-96-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 3290-92-4 CMF C18 H26 O6

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-97-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

$$H_2C = CH - C - O - (CH_2)_6 - O - C - CH = CH_2$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-98-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2-\text{CH}_2-\text{O-C-C-Me} \end{array}$$

CM 2

CRN 68548-08-3 CMF C14 H25 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

CM 4

CRN 79-10-7

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0
HO- C- CH=== CH2
IC
     ICM B05D007-24
     ICS B05D001-36; B05D005-06; B05D007-14; C09D005-38; C08F026-06;
          C09C001-64; C09C003-10
     42-7 (Coatings, Inks, and Related Products)
CC
     automobile multilayered coating weather resistance; UV
ST
     absorber light stabilizer acrylic resin treatment aluminum
     flake
     Discoloration prevention
IT
     Pigments, nonbiological
        (UV absorber/light stabilizer-containing resin-
        and colorant-treated Al flake metallic coatings in formation of
        multilayer films)
IT
     Aminoplasts
        (UV absorber/light stabilizer-containing resin-
        and colorant-treated Al flake metallic coatings in formation of
        multilayer films)
IT
     Acrylic polymers, uses
        (hydroxy-containing; UV absorber/light
        stabilizer-containing resin- and colorant-treated Al flake metallic
        coatings in formation of multilayer films)
IT
     Coating materials
        (multilayer; UV absorber/light
        stabilizer-containing resin- and colorant-treated Al flake metallic
        coatings in formation of multilayer films)
IT
     Automobiles
        (panels; UV absorber/light
        stabilizer-containing resin- and colorant-treated Al flake metallic
        coatings in formation of multilayer films)
IT
     247579-96-0P, Acrylic acid-trimethylolpropane
     trimethacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
     benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
     copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol
     diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
     benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate
     copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol
     diacrylate-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-
     benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate
        (UV absorber/light stabilizer-containing resin-
        and colorant-treated Al flake metallic coatings in formation of
        multilayer films)
     147-14-8, Heliogen blue L 6900
IT
                                     84632-65-5, Irgazin DPP red BO
     130213-50-2, Colofine red 236A
        (UV absorber/light stabilizer-containing resin-
        and colorant-treated Al flake metallic coatings in formation of
        multilayer films)
IT
     9003-08-1, Melamine resin
        (UV absorber/light stabilizer-containing resin-
        and colorant-treated Al flake metallic coatings in formation of
        multilayer films)
IT
     66105-72-4, Luga Bake Clear
         (UV absorber/light stabilizer-containing resin-
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and colorant-treated Al flake metallic coatings in formation of multilayer films)

IT 7429-90-5, Aluminum, uses

(flake; UV absorber/light stabilizer-containing resin- and colorant-treated Al flake metallic coatings in formation of multilayer films)

L38 ANSWER 34 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:751749 HCAPLUS

DOCUMENT NUMBER: 132:13180

TITLE: Water- and whether-resistant recording liquid

composition

INVENTOR(S): Mori, Hiroshi; Akata, Atsuo

PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11323231	A2	19991126	JP 1998-127835	
UP 11323231	AZ	19991120	OF 1990 127033	1998 0511
TD 2060102	na	10001102	<	0311
JP 2969102 PRIORITY APPLN. INFO.:	B2	19991102	JP 1998-127835	1998
				0511

AB Title composition comprises an oil-soluble dye and a bisbenzotriazole-phenol UV-absorbent. Thus, 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-(2-hydroxyethyl)phenol] (RUVA 100) 129.3 g was reacted with ε-caprolactone 170.3 g to give a product having Mn 1392, Mw 1688, 2 g of which was mixed with 5 g C.I.Solvent Red 495, di-Et phthalate 43 g to give a recording liquid, showing good properties.

IT 214746-68-6P

(Water- and whether-resistant recording liquid composition)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α'-[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1ethanediyl]]bis[ω-hydroxy- (9CI) (CA INDEX NAME)

HO (CH₂)
$$_5$$
 - C- O $_n$ CH₂ - CH₂ CH₂ CH₂ CH₂ CH₂ CH₂ CH₂

PAGE 1-B

IC ICM C09D011-02

ICS C07D249-20; C09K003-00

CC 42-12 (Coatings, Inks, and Related Products)

ST UV absorbent recording liq

IT Recording materials

UV stabilizers

(Water- and whether-resistant recording liquid composition)

IT 214746-68-6P

(Water- and whether-resistant recording liquid composition)

IT 502-44-3, ϵ -Caprolactone 196516-61-7, RUVA 100

(Water- and whether-resistant recording liquid composition)

L38 ANSWER 35 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:698272 HCAPLUS

DOCUMENT NUMBER: 131:311734

TITLE: Coloring aluminum pigments and their metallic

coating compositions

INVENTOR(S): Nakamura, Shigeru; Nakao, Yasushi; Egawa,

Takao

PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11302558	A2	19991102	JP 1998-107212	1998

0417

PRIORITY APPLN. INFO.:

JP 1998-107212

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1998 0417

Title pigments are Al flakes colored with pigments and coated with AB UV absorbent- and/or light stabilizer-containing resins. Ball milling Mirror Glow 1000 with Irgazin DPP red BO in mineral spirit and heating with a composition containing AIBN, 2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole, 2,2,6,6-tetramethyl-4-piperidyl methacrylate, acrylic acid, and 1,6-hexanediol diacrylate gave a pigment, which was mixed in an acrylic coating to form films showing color deviation 0.2 and 2.0 under weatherometer for 400 h and 1,200 h, resp.

247579-96-0P, Acrylic acid-2-(2'-hydroxy-5-IT methacryloxyethylphenyl) -2H-benzotriazole-2,2,6,6-tetramethyl-4piperidyl methacrylate-trimethylolpropane trimethacrylate copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2Hbenzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2Hbenzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer

(UV absorber/light stabilizer-containing resin-coated and colored Al pigments for coatings with weather-resistant colors)

RN 247579-96-0 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-ethyl-2-[[(2-methyl-1-oxo-2-CN propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 31582-45-3 CMF C13 H23 N O2

CRN 3290-92-4 CMF C18 H26 O6

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-97-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CRN 31582-45-3 CMF C13 H23 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 247579-98-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1,6-hexanediyl di-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--} \text{CH}_2\text{--} \text{O}\text{--} \text{C}\text{--} \text{C}\text{--} \text{Me} \end{array}$$

CRN 68548-08-3 CMF C14 H25 N O2

CM 3

CRN 13048-33-4 CMF C12 H18 O4

$$^{\circ}_{\parallel}$$
 $^{\circ}_{\parallel}$ $^{\circ}_{\parallel}$

CM 4

CRN 79-10-7 CMF C3 H4 O2

IC ICM C09C001-64

CS C09C003-10; C09D005-38

- CC 42-6 (Coatings, Inks, and Related Products)
- ST discoloration prevention **UV** absorber light stabilizer coated aluminum pigment; weather resistance **UV** absorber light stabilizer coated aluminum pigment
- IT Discoloration prevention Light stabilizers Pigments, nonbiological

```
UV stabilizers
```

(UV absorber/light stabilizer-containing

resin-coated and colored Al pigments for coatings with weather-resistant colors)

IT Acrylic polymers, uses

(UV absorber/light stabilizer-containing

resin-coated and colored Al pigments for coatings with

weather-resistant colors)

7429-90-5, Aluminum, uses IT

(Alpaste 725N; UV absorber/light

stabilizer-containing resin-coated and colored Al pigments for

coatings with weather-resistant colors)

247579-96-0P, Acrylic acid-2-(2'-hydroxy-5-IT methacryloxyethylphenyl) -2H-benzotriazole-2,2,6,6-tetramethyl-4-

piperidyl methacrylate-trimethylolpropane trimethacrylate

copolymer 247579-97-1P, Acrylic acid-1,6-hexanediol

diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-

benzotriazole-2,2,6,6-tetramethyl-4-piperidyl methacrylate

copolymer 247579-98-2P, Acrylic acid-1,6-hexanediol

diacrylate-2-(2'-hydroxy-5-methacryloxyethylphenyl)-2H-

benzotriazole-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate copolymer

(UV absorber/light stabilizer-containing

resin-coated and colored Al pigments for coatings with

weather-resistant colors)

84632-65-5, Irgazin DPP red BO IT147-14-8, Heliogen blue L 6900

130213-50-2, Colofine red 236A

(UV absorber/light stabilizer-containing

resin-coated and colored Al pigments for coatings with weather-resistant colors)

L38 ANSWER 36 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:267181 HCAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

130:353411

TITLE:

Scratch- and weather-resistant transparent

multilayer films for safety glass Tanaka, Yoshio; Mimura, Takashi

PATENT ASSIGNEE(S):

Toray Industries, Inc., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11115107	A2	19990427	JP 1997-296445	
				1997
			<	1015
PRIORITY APPLN. INFO.:			JP 1997-296445	
				1997
				1015

AB Title films, useful for application onto an outdoor side of window glass, consist of a thermoplastic substrate and an **uv**absorbing layer on ≥1 side of the substrate and satisfy surface pencil hardness of the UV-

absorbing side H or higher value. Thus, Lumirror T 60 (PET) film was coated with a composition containing 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (I)-Me methacrylate copolymer 95, Nikkacoat FS 12 (modified polyester) 4, and Cymel 370 (methylated melamine) 1 part, subsequently with a composition containing I 20, dipentaerythritol hexacrylate 68, Aronix M 7100 (acrylic oligomer) 8, and 2-hydroxypropyl acrylate 4 parts, exposed to UV irradiation at 300 mJ/cm2, and coated with an adhesive on the back side to give a film showing haze 2.5% initially and 3.5% after 144-h weathering test and pencil hardness (JIS K 5400) 2H.

IT 223916-99-2P 223917-04-2P

(scratch- and weather-resistant transparent films having acrylic benzotriazole polymer layers for safety glass)

RN 223916-99-2 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with Aronix M 7100, 2-hydroxypropyl 2-propenoate and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CN

CRN 96478-09-0 CMF C18 H17 N3 O3

CM 2

CRN 76723-57-4 CMF Unspecified CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 29570-58-9 CMF C28 H34 O13

CRN 999-61-1 CMF C6 H10 O3

RN 223917-04-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4hydroxyphenyl]ethyl ester, polymer with Aronix M 7100,
2-hydroxypropyl 2-propenoate, methyl 2-methyl-2-propenoate and
2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA
INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--} \text{CH}_2\text{--} \text{O}\text{--} \text{C}\text{--} \text{Me} \end{array}$$

CM 2

CRN 76723-57-4 CMF Unspecified CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CRN 29570-58-9 CMF C28 H34 O13

CM 4

CRN 999-61-1 CMF C6 H10 O3

CM 5

CRN 80-62-6 CMF C5 H8 O2

IC ICM B32B027-18 ICS C03C017-32

CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 42

st methacryloxy benzotriazole methacrylate copolymer transparent film; dipentaerythritol acrylate copolymer scratch resistant film; acrylic benzotriazole polymer weather resistant film; PET multilayer film safety window glass; UV absorber acrylic benzotriazole polymer film

IT 220463-40-1P 223916-99-2P 223917-04-2P

(scratch- and weather-resistant transparent films having acrylic benzotriazole polymer layers for safety glass)

L38 ANSWER 37 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:224457 HCAPLUS

DOCUMENT NUMBER: 130:283065

TITLE: Weather- and scratch-resistant thermoplastic

overlay films having good transparency and

laminates therewith

INVENTOR(S):

Tanaka, Iwao; Mimura, Takashi; Tanaka, Yoshio

PATENT ASSIGNEE(S): SOURCE:

Toray Industries, Inc., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

Japanese

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11091025	A2	19990406	JP 1997-256762	
				1997
				0922
			<	
PRIORITY APPLN. INFO.:			JP 1997-256762	
				1997
				0922

AB Title films have surface hard layers with pencil hardness ≥H and weather resistance on at least one side of thermoplastic film substrates. Thus, one side of a biaxially oriented poly(ethylene terephthalate) film was coated with PUVA 30M, cured at 120° for 2 min, further coated with a hard layer composition comprising pentaerythritol triacrylate 60, 2,2-bis(4-acryloxydiethoxyphenyl)propane 10, N-vinylpyrrolidone 30, and 2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole (reactive UV absorbant) 25 parts, and cured with UV to give a film having pencil hardness 2H. The film was laminated with a PVC film and further a steel plate to give a laminate having good weather and scratch resistance.

IT222974-67-6P

> (hard layer coating composition for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

RN 222974-67-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4hydroxyphenyl]ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, 2-(hydroxymethyl)-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3propanediyl di-2-propenoate and (1-methylethylidene) bis (diethoxy-4,1-phenylene) di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0 CMF C18 H17 N3 O3

CRN 83052-58-8 CMF C29 H36 O8

CCI IDS

CM 3

CRN 3524-68-3 CMF C14 H18 O7

CM 4

CRN 88-12-0 CMF C6 H9 N O

IC ICM B32B007-02

ICS B32B015-08; B32B027-36; C08J007-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 55

ST weather scratch resistant thermoplastic overlay film; coating acrylic polymer reactive **UV absorbant** polyethylene terephthalate substrate; laminate PVC polyvinyl chloride steel overlay film

IT Acrylic polymers, uses

(coating compns. for overlay films; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

IT 222974-70-1P

(coating composition for overlay film; preparation of weatherand scratch-resistant thermoplastic overlay films and their laminates)

IT 153175-43-0, PUVA 30M

(coating composition for overlay film; preparation of weatherand scratch-resistant thermoplastic overlay films and their laminates)

IT 222974-67-6P

(hard layer coating composition for overlay film; preparation of weather- and scratch-resistant thermoplastic overlay films and their laminates)

L38 ANSWER 38 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:127076 HCAPLUS

DOCUMENT NUMBER: 130:200949

TITLE: Method of preparing foldable high refractive

DATE

index acrylic ophthalmic device materials

APPLICATION NO.

DATE

INVENTOR(S): Leboeuf, Albert R.; Karakelle, Mutlu

PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA

KIND

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

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₩O	9908136		λ1	19990218	WO 1998-US14419	
	JJ00130		AI	13330210	WO 1990 0014419	1998
						0714
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	W: AU,	BR, CA,	CN, JP			
	RW: AT,	BE, CH,	CY, DE	, DK, ES,	FI, FR, GB, GR, IE,	IT, LU,
	MC,	NL, PT,	SE			
US	5891931		Α	19990406	US 1997-908229	
						1997
						0807
					<	
ΑU	9883964		A1	19990301	AU 1998-83964	
						1998
						0714
דזת	724873		ъ0	20001005	<	
	1002244			20001005		
EP	1002244		AI	20000524	EP 1998-934449	1998
						0714
					<	0/14
ED	1002244		D 1	20030226	ζ	
DI					GB, GR, IT, LI, LU,	NI. SE
		PT, IE,		, ES, FR,	GB, GR, 11, H1, H0,	NII, DII,
BR	9811860			20000815	BR 1998-11860	
			* *		21 250 11000	1998
						0714

		SANDERS	10/073,780	Page 177
JP 2002511012	Т2	20020409	JP 1999-512134 19 07	
AT 233409	E	20030315	< AT 1998-934449	
PT 1002244	Т	20030630	07 < PT 1998-934449	14
F1 1002244	ı	20030030	19 07	
ES 2191947	Т3	20030916	ES 1998-934449	98 14
CA 2279452	С	20030923	< CA 1998-2279452	98
CA 2279452	AA	19990218	<	14
PRIORITY APPLN. INFO.:				997 107
				998 714
AP Foldable agrulia	hiah x	efractive i	< nder onbthalmic device	

AB Foldable, acrylic, high refractive index ophthalmic device materials containing a UV absorbing chromophore are cured by exposure to blue light using a benzoylphosphine oxide photoinitiator. The compns. of monomers such as 2-phenylethyl acrylate, N-vinylpyrrolidone and EGDMA cured well in the presence of a benzoylphosphine oxide photoinitiator.

IT 186452-62-0P 220735-44-4P 220735-45-5P 220735-47-7P 220735-49-9P

(preparation of. foldable high refractive index acrylic ophthalmic device materials)

RN 186452-62-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol, 1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ &$$

CRN 3530-36-7 CMF C11 H12 O2

CM 3

CRN 1070-70-8 CMF C10 H14 O4

$$H_2C = CH - C - O - (CH_2)_4 - O - C - CH = CH_2$$

CM 4

CRN 868-77-9 CMF C6 H10 O3

$$^{\mathrm{H_{2}C}}_{\parallel}$$
 $^{\mathrm{C}}_{\parallel}$ $^{\mathrm{C}}_{\parallel}$ $^{\mathrm{CH_{2}-CH_{2}-CH_{2}-OH}}$

RN 220735-44-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-phenylethyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol, 1,4-butanediyl di-2-propenoate and 2-phenylethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

$$\begin{array}{c|c} & \text{CH}_2 \\ & \text{CH}_2 - \text{C-Me} \end{array}$$

CRN 3683-12-3 CMF C12 H14 O2

$$H_2C$$
 O \parallel \parallel \parallel $Me-C-C-O-CH_2-CH_2-Ph$

CM 3

CRN 3530-36-7 CMF C11 H12 O2

CM 4

CRN 1070-70-8 CMF C10 H14 O4

RN 220735-45-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol, hexyl 2-propenoate and 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

$$\begin{array}{c|c} & \text{Me} & \\ & \text{CH}_2 \\ & \text{CH}_2 - \text{C-Me} \end{array}$$

CM 2

CRN 48145-04-6 CMF C11 H12 O3

CM 3

CRN 2499-95-8 CMF C9 H16 O2

CM 4

CRN 97-90-5 CMF C10 H14 O4

RN 220735-47-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol and hexyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

CM 2

CRN 2499-95-8 CMF C9 H16 O2

$$0$$
 || Me- (CH₂)₅-- O- C- CH== CH₂

CRN 97-90-5 CMF C10 H14 O4

RN 220735-49-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4-methyl-6-(2-methyl-2-propenyl)phenol, 1-ethenyl-2-pyrrolidinone, hexyl 2-propenoate and 2-phenoxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 98809-58-6 CMF C17 H17 N3 O

$$N$$
 N
 CH_2
 CH_2-C-Me

CM 2

CRN 48145-04-6 CMF C11 H12 O3

$$\begin{array}{c} & O \\ || \\ PhO-CH_2-CH_2-O-C-CH-CH_2 \\ \end{array}$$

CM 3

CRN 2499-95-8 CMF C9 H16 O2

$$0$$
 || Me- (CH₂)₅-O- C- CH== CH₂

CRN 97-90-5 CMF C10 H14 O4

CM 5

CRN 88-12-0 CMF C6 H9 N O

IC ICM G02B001-04

ICS A61L027-00; C08F002-50; C08F020-18

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 37, 73

IT79-10-7DP, Acrylic acid, esters, polymers 79-41-4DP, MethAcrylic acid, esters, polymers 937-41-7DP, Phenyl acrylate, polymers 2374-55-2DP, 4-Methylphenyl acrylate, polymers 2495-35-4DP, Benzyl acrylate, polymers 3530-36-7DP, 2-Phenylethyl acrylate, 9003-39-8P, PVP 9003-53-6P polymers 9011-14-7P, PMMA 21080-21-7DP, polymers 28825-60-7P, Poly(2-Phenylethyl 48145-04-6DP, 2-Phenoxyethyl acrylate, polymers methacrylate) 85909-41-7DP, 3-Phenylpropyl acrylate, polymers 88465-91-2DP, 4-Phenylbutyl acrylate, polymers 91990-21-5DP, 4-Methylbenzyl 95175-38-5DP, polymers acrylate, polymers 103969-85-3P, 4-Phenoxybutyl acrylate 120763-41-9P 146114-93-4P 157039-45-7P 157039-46-8P 158195-49-4DP, 3-Phenoxypropyl acrylate, polymers 186452-62-0P 220728-55-2P 220735-41-1DP, polymers 220735-42-2DP, polymers 220735-43-3DP, polymers 220735-44-4P 220735-45-5P 220735-47-7P 220735-49-9P

(preparation of. foldable high refractive index acrylic ophthalmic device materials)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 39 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 1999:113890 HCAPLUS

5

DOCUMENT NUMBER: 130:160660

TITLE: Method and composition for producing

activating light-absorbing lenses

INVENTOR(S): Buazza, Omar M.; Luetke, Stephen C.; Powers,

Galen R.

PATENT ASSIGNEE(S): Q2100, Inc., USA

SOURCE: PCT Int. Appl., 181 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA1	ENT I	NO .			KINI) -	DATE			APPI	LICAT	ION :	NO.		DATE
 WO	99068	- 887			Al		1999	0211	,	WO I	L998-	US15	959		
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	W :	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,		< , BY,	CA,	CH,	CN,	CU,
		CZ,	DE,	DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,
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CA	2297	004			AA		1999	0211		CA :	1998-	2297	004		1998
															0731
											<				0/31
ΙΙΑ	9887	636			ΔЗ		1999	0222			1998-	8763	6		
	3007						1,7,7,7	UZZZ				0,05	•		1998
															0731
										•	<				
AU	7449	49			B2		2002	0307							
ΕP	1000	385			A1		2000	0517		EP :	1998-	9391	47		
															1998
															0731
										•	<				
EP	1000						2004								
	R:					DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,
TD	2001		PT,	IE,			2001	0001		TD (2000	-0			
JP	2001	5122	49		T2		2001	0821		JP.	2000-	5055	52		1998
															0731
											< - -				0/31
ΑТ	2657	0.0			E		2004	0515			1998-	9391	47		
	2057						2001	0313		nı.		<i></i>	T (1998
															0731
											<				
US	6712	596			В1		2004	0330			1999-	3958	94		
															1999
															0914
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US	6367	928			B1		2002	0409		us :	1999-	3981	16		
															1999
															0916

US 2003183960	A1	20031002	ΙΙς	< 2002-328550		
03 2003103900	AI	20031002	03	2002-320330		2002
						1223
				<		
US 6939899	B2	20050906				
PRIORITY APPLN. INFO.:			US	1997-904289	·A	
						1997
						0731
				<		
			US	1997-959973	A	
						1997
						1029
				<		
			WO	1998-US15959	W	
						1998
						0731
				<		
			US	1999-395894	A1	
						1999
						0914
				<		

AB An eyeglass lens-forming composition containing light-absorbing compds. which may undergo light-initiated polymerization is provided. Typically, a lens-forming composition that absorbs light does not permit enough activating radiation to penetrate into the depths of the lens cavity to adequately initiate polymerization of the lens-forming composition. An embodiment of the invention provides a system and method for curing such a lens-forming composition to form a lens that does not transmit activating light. An activating light is used having a wavelength greater than the wavelengths of light which the light-absorbing compds. absorb. The power of the formed lenses may be controlled by varying the lens-forming conditions. Addnl., the lens-forming process may be controlled using a microprocessor-based control system.

IT 104810-47-1

(photopolymerizable compns. for eyeglass lens manufacture containing)

RN 104810-47-1 HCAPLUS

PAGE 1-A

$$CH_2-CH_2-CH_2-CH_2-CH_2$$

PAGE 1-B

IC ICM G03F007-00 ICS G02B001-04; B29D011-00

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 9, 35, 73

IT Eyeglasses Lenses

(photopolymerizable compns. and method for manufacture of)

IT 84000-75-9

(HiRi; photopolymerizable compns. for eyeglass lens manufacture containing)

IT 947-19-3, 1-Hydroxycyclohexyl phenyl ketone (Irgacure 184; photopolymerizable compns. for eyeglass lens manufacture containing)

IT 6606-59-3

(SR 239; photopolymerizable compns. for eyeglass lens manufacture containing)

IT 17831-71-9, Tetraethylene glycol diacrylate (SR 268; photopolymerizable compns. for eyeglass lens manufacture containing)

IT 164251-88-1, Thermoplast Red 454
(Thermoplast Red 454; photopolymerizable compns. for eyeglass lens manufacture containing)

IT 61725-74-4, Zapon Brown 286 (Zapon Brown 286; photopolymerizable compns. for eyeglass lens manufacture containing)

TT 71872-85-0, Zapon Brown 287
(Zapon Brown 287; photopolymerizable compns. for eyeglass lens manufacture containing)

Henzoyl peroxide, uses 99-97-8, N,N-Dimethyl-p-toluidine 100-10-7, p-Dimethylaminobenzaldehyde 102-71-6, Triethanolamine, uses 108-32-7, Propylene carbonate 118-55-8, Phenyl salicylate 119-61-9, Benzophenone, uses 123-31-9, 1,4-Benzenediol, uses 131-57-7, 2-Hydroxy-4-methoxybenzophenone 134-84-9, 4-Methylbenzophenone 492-22-8, Thioxanthone 611-73-4 954-16-5, 2,4,6-Trimethylbenzophenone 1680-21-3, Triethylene glycol diacrylate 2082-79-3 2440-22-4 3147-75-9 4702-90-3, Thermoplast Yellow 104 5232-99-5, Ethyl-2-cyano-3,3-diphenyl

5495-84-1, 2-Isopropylthioxanthone 6175-45-7, 2,2-Diethoxyacetophenone 10287-53-3, Ethyl 4dimethylaminobenzoate 15206-55-0, Methylbenzoyl formate 41484-35-9 24650-42-8 15774-82-0, 2-Methylthioxanthone 44798-79-0, N,N-Dimethyldiethanolamine 41556-26-7, Tinuvin 292 55426-74-9, Ethyl 2-dimethylaminobenzoate 58817-05-3, Octyl p-dimethylaminobenzoate 66231-33-2, Oil Soluble Blue II 67362-76-9, Butoxyethyl 4-dimethylaminobenzoate 71868-10-5 98954-36-0 104810-47-1 75980-60-8 104810~48-2 125051-32-3 178905-31-2 178905-32-3 119313-12-1 192662-79-6, Tinuvin 400 204528-73-4, CN-386 220286-80-6, Zapon Green 936 220286-97-5, PRO 629 220287-01-4, Thermoplast Blue P (photopolymerizable compns. for eyeglass lens manufacture

containing)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE 11 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 40 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:97324 HCAPLUS

DOCUMENT NUMBER: 130:197677

Colored sheets for surface protection and TITLE:

manufacture of moldings with high surface

hardness using them

Nakamura, Yuzo INVENTOR(S):

Nissha Printing Co., Ltd., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 10 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11034248	A2	19990209	JP 1997-210107	1997 0717
			<	
PRIORITY APPLN. INFO.:			JP 1997-210107	
				1997
				0717

AB Title protective sheets comprise colored film substrates coated with protective layers obtained from thermally crosslinked products of heat- and active energy ray-curable polymer compns. containing polymers with (meth)acrylic equivalent weight 100-300 g/equiv, OH value 20-500, and weight-average mol. weight 5000-50,000, and polyfunctional isocyanates as crosslinkers. moldings are prepared by steps of: (1) setting the protective sheets in a mold, (2) injecting polymers into the mold cavity, (3) molding the polymers together with the protective sheets, and (4) irradiating with active energy ray. The moldings can also be prepared by applying the protective sheets on a molding surface, heating to soften the sheets, and affixing them to molding surface by vacuum. Thus, a C black-containing polycarbonate protective sheet having a layer obtained from Coronate HX (HDI trimer) and glycidyl methacrylate-Me methacrylate copolymer acrylate, when

injection-molded with an acrylic resin, gave a molding having surface with good resistance to abrasion, crack and chemical

IT 135590-53-3

(UV absorbers; colored sheets for protection of molding surface from scratch and chems.)

RN 135590-53-3 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX NAME)

IC ICM B32B027-30

ICS C09D175-16; B29C045-14; C09D004-02; C09D133-14

CC 38-3 (Plastics Fabrication and Uses)

IT **135590-53-3** 178905-31-2

(UV absorbers; colored sheets for protection of molding surface from scratch and chems.)

L38 ANSWER 41 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:724043 HCAPLUS

DOCUMENT NUMBER: 130:39553

TITLE: Transfer materials, surface protective sheets,

and light-, abrasion- and chemical-resistant

<---

moldings using them

INVENTOR(S): Nakamura, Yuzo

PATENT ASSIGNEE(S): Nissha Printing Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GI

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10297185	A2	19981110	JP 1997-125103	1997 0428
PRIORITY APPLN. INFO.:			< JP 1997-125103	1997 0428

The transfer materials have on 1 side of a releasable substrate sheet a protective layer comprising thermally cured products from active energy ray-curable compns. containing polyisocyanates and polymers [(meth)acrylic equiv 100-300 g/equiv, OH value 20-500, and weight-average mol. weight 5000-50,000] and containing compound I

compds. II as **UV absorbers.** The surface-protective sheets have the protective layer on 1 side and an adhesive layer on the other side of a nonreleasable substrate sheet. The title moldings are manufactured by attaching the transfer materials to the surfaces of moldings, removing the substrate sheets, and irradiating the moldings with active energy rays. Alternatively, the moldings are manufactured by placing the surface protective sheets over the surfaces of moldings, softening the substrate sheets under heat, attaching them on the molding surfaces by vacuum suction, and irradiating them with active energy rays. Thus, a polyester film was successively coated with a release agent, a protective layer from a composition containing 1,6-hexane diisocyanate trimer (Coronate HX), I, and a varnish containing glycidyl methacrylate-Me methacrylate copolymer and acrylic acid, an anchor coating layer, printed layer, and an acrylic adhesive layer to give a transfer material. The material was transferred onto an acrylic resin article and irradiated with UV after removing the substrate to give a tray showing high abrasion resistance, and yellowing resistance after 80-h exposure to UV rays at 75°.

IT 216854-00-1P

or

(transfer sheets having protective layers containing UV absorbers for light-, abrasion- and chemical-resistant moldings)

RN 216854-00-1 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-{(2-methyl-1-oxo-2-

propenyl)oxy]propyl ester, polymer with 1,6-diisocyanatohexane
trimer, methyl 2-methyl-2-propenoate, oxiranylmethyl
2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 135590-53-3 CMF C26 H31 N3 O6

CM 2

CRN 106-91-2 CMF C7 H10 O3

$$\begin{array}{c|c} O & CH_2 \\ & \parallel & \parallel \\ CH_2-O-C-C-Me \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} \text{H}_2\text{C} & \text{O} \\ & \parallel & \parallel \\ \text{Me-C-C-OMe} \end{array}$$

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 28574-90-5

CMF (C8 H12 N2 O2)3

CCI PMS

CM 6

CRN 822-06-0 CMF C8 H12 N2 O2

OCN-(CH₂)₆-NCO

IT 216853-99-5P

(transfer sheets having protective layers containing UV absorbers for light-, abrasion- and chemical-resistant moldings)

RN 216853-99-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with Coronate HX, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 144245-98-7 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 135590-53-3 CMF C26 H31 N3 O6

CM 3

CRN 106-91-2 CMF C7 H10 O3

4

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CRN 80-62-6
     CMF C5 H8 O2
  H<sub>2</sub>C O
Me-C-C-OMe
          5
     CM
     CRN 79-10-7
     CMF C3 H4 O2
    0
HO- C- CH= CH2
IC
     ICM B44C001-165
     ICS B32B027-00
CC
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 42, 74
ST
     polyisocyanate crosslinked acrylate polymer transfer; methacrylate
     polymer polyisocyanate crosslinked transfer;
     hydroxyphenylbenzotriazole UV absorber surface
     protective sheet; hydroxyphenyltriazine UV
     absorber surface protective sheet; light resistance sheet
     polyisocyanate crosslinked polyacrylate; abrasion resistance sheet
     polyisocyanate crosslinked polyacrylate; chem resistance sheet
     polyisocyanate crosslinked polyacrylate
IT
     Coating materials
     Coating materials
         (light-resistant; transfer sheets having protective layers
        containing UV absorbers for light-, abrasion-
        and chemical-resistant moldings)
IT
     Abrasion-resistant materials
     Chemically resistant materials
     Crosslinking
     Light-resistant materials
     Plates
     Transfers
     UV stabilizers
         (transfer sheets having protective layers containing UV
        absorbers for light-, abrasion- and chemical-resistant
        moldings)
IT
     216853-97-3
                    216853-98-4
         (UV stabilizers; transfer sheets having protective layers
        containing UV absorbers for light-, abrasion-
        and chemical-resistant moldings)
IT
     135590-53-3
         (UV stabilizers; transfer sheets having protective layers
        containing UV absorbers for light-, abrasion-
        and chemical-resistant moldings)
IT
     216854-00-1P
         (transfer sheets having protective layers containing UV
```

absorbers for light-, abrasion- and chemical-resistant moldings)

IT 204701-37-1P 204701-64-4P 216853-99-5P

> (transfer sheets having protective layers containing UV absorbers for light-, abrasion- and chemical-resistant moldings)

L38 ANSWER 42 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:651031 HCAPLUS

DOCUMENT NUMBER:

129:331574

TITLE:

Polyester-based UV absorbers , their manufacture, and resin compositions containing them

INVENTOR(S):

Endo, Toshio; Isobu, Tomohisa; Okumura, Koichi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10265557	A2	19981006	JP 1997-91463	
				1997
				0326
			<	
JP 3714575	B2	20051109		
TW 513450	В	20021211	TW 1998-87115575	
				1998
				0918
			<	0320
PRIORITY APPLN. INFO.:			JP 1997-91462 A	
			01 1757 71402	1997
				0326
				0320
			<	
			JP 1997-91463 A	
				1997
				0326

AB UV absorbing group-containing polyesters, preferably H[O(CR1R2)nCO]mQ[CO(CR1R2)n'O]m'H [R1, R2 = H, C1-10 alkyl; n, n' = 4-8; m, m' = 1-20; Q = 3,3'-methylenebis[5-(2Hbenzotriazol-2-yl)-4-hydroxybenzeneethanol] (I) residue], are manufactured by ring-opening addition polymerization of lactones to I. 170.3 g ε-caprolactone was treated with 129.3 g I (MBEP) at 150° for 6 h in the presence of Sn catalyst (Scat 24) to give a polyester, 2 parts of which was added to 100 parts polypropylene and the resulting mixture was injection molded to give a test piece showing excellent tensile strength retention after accelerated weathering for 1000 h.

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IT 214746-68-6P

(methylenebis [(bentotriazolylhydroxyphenyl)ethyl] group-containing polyester UV absorbers for resin compns.)

RN 214746-68-6 HCAPLUS

CN Poly[oxy(1-oxo-1,6-hexanediyl)], α,α' -[methylenebis[[5-(2H-benzotriazol-2-yl)-4-hydroxy-3,1-phenylene]-2,1-

ethanediyl]]bis[ω -hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-B

IC ICM C08G063-08

ICS C08G063-685; C09K003-00; C07D249-20

CC 37-6 (Plastics Manufacture and Processing)

ST UV absorbing polyester methylenebis
benzotriazolylhydroxyphenylethyl polycaprolactone; weather
resistance polypropylene benzotriazolylhydroxyphenylethyl
polycaprolactone blend

IT UV stabilizers

(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester UV absorbers for resin
compns.)

IT Acrylic polymers, properties

Polyamides, properties

Polycarbonates, properties

Polyesters, properties

Polyolefins

(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing polyester UV absorbers for resin

compns.)

IT Polyurethanes, properties

(thermoplastic; methylenebis[(bentotriazolylhydroxyphenyl)ethyl
] group-containing polyester UV absorbers for

resin compns.)

IT 214746-68-6P 215232-60-3P

(methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing
polyester UV absorbers for resin
compns.)

9002-85-1, Poly(vinylidene chloride) 9002-86-2, Poly(vinyl chloride) 9003-07-0, Polypropylene 9003-53-6, Polystyrene 9003-56-9, Acrylonitrile-butadiene-styrene copolymer 9011-14-7,

PMMA 25038-59-9, Poly(ethylene terephthalate), properties (methylenebis[(bentotriazolylhydroxyphenyl)ethyl] group-containing polyester UV absorbers for resin compns.)

L38 ANSWER 43 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:146966 HCAPLUS

DOCUMENT NUMBER:

128:245252

TITLE:

Scratch- and weather-resistant UV-curable

coating compositions for plastics

INVENTOR(S):

Higuchi, Toshihiko; Kondo, Satoshi; Yamamoto,

Hirotsugu

PATENT ASSIGNEE(S):

Asahi Glass Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10060307	A2	19980303	JP 1996-225535	
				1996
				0827
			<	
PRIORITY APPLN. INFO.:			JP 1996-225535	
				1996
				0827

AB The compns. contain 100 parts UV-curable monomers containing ≥20% monomers bearing ≥2 (meth)acryloyl group per mol., 0.1-20 parts UV absorbers containing benzophenone or benzotriazole derivs. bearing (meth)acryloyl groups, and 0.1-20 parts photoinitiators. Thus, irradiation of 100 parts dipentaerythritol hexaacrylate and 5 parts 2-[2-hydroxxy-5-(2-acryloyloxyethyl)phenyl]benzotriazole in the presence of photoinitiator by UV gave coatings showing good appearance, scratch and weather resistance.

IT 204849-33-2P 204849-35-4P

(scratch- and weather-resistant UV-curable coating compns. for plastics)

RN 204849-33-2 HCAPLUS

2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2 CMF C17 H15 N3 O3

CRN 29570-58-9 CMF C28 H34 O13

RN 204849-35-4 HCAPLUS

2-Propenoic acid, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)phenol (9CI) (CA INDEX NAME)

CM 1

CRN 29570-58-9 CMF C28 H34 O13

CRN 25973-55-1 CMF C22 H29 N3 O

ICM C09D004-02 IC

CC 42-10 (Coatings, Inks, and Related Products)

IT Coating materials

> (UV-curable; scratch- and weather-resistant UV-curable coating compns. for plastics)

IT Polyurethanes, uses

> (acrylates, polymers; scratch- and weather-resistant UV-curable coating compns. for plastics)

UV stabilizers IT

> (polymerizable; scratch- and weather-resistant UV-curable coating compns. for plastics)

IT 126-58-9DP, Dipentaerythritol, acrylates, reaction products with hexamethylene diisocyanate, polymers 818-61-1DP, 2-Hydroxyethyl acrylate, reaction products with ethoxylated bisphenol A-hexamethylene diisocyanate copolymer, polymers 822-06-0DP, Hexamethylene diisocyanate, reaction products with dipentaerythritol acrylates, polymers 16432-81-8DP, polymers with polyurethane acrylates 25973-55-1DP, polymers with polyurethane acrylates 138455-55-7DP, acrylates, polymers 170103-27-2DP, polymers with polyurethane acrylates 204849-33-2P 204849-34-3P 204849-35-4P (scratch- and weather-resistant UV-curable coating

compns. for plastics)

L38 ANSWER 44 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:87716 HCAPLUS

DOCUMENT NUMBER: 128:154827

TITLE: Polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone

derivatives as **UV** absorbers

INVENTOR(S): Toan, Vien Van; Valet, Andreas; Hayoz, Pascal PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.;

Toan, Vien Van; Valet, Andreas; Hayoz, Pascal

SOURCE: PCT Int. Appl., 152 pp.

CODEN: PIXXD2 DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND APPLICATION NO. DATE DATE ------

WO	9803489			A1	19980129	WO 1997-EP3567	1997 0707
					•		0707
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						BG, BR, BY, CA, CH,	
						GE, GH, HU, IL, IS,	
						LS, LT, LU, LV, MD,	
	MN,	MW,	MX,	NO,	NZ, PL, PT,	RO, RU, SD, SE, SG,	SI, SK,
	SL,	TJ,	TM,	TR,	TT, UA, UG,	US, UZ, VN, YU, ZW,	AM, AZ,
	BY,	KG,	ΚZ,	MD,	RU, TJ, TM		
	RW: GH,	KE,	LS,	MW,	SD, SZ, UG,	ZW, AT, BE, CH, DE,	DK, ES,
						MC, NL, PT, SE, BF,	
	CG,	CI,	CM,	GA,	GN, ML, MR,	NE, SN, TD, TG	
CA	2258523					CA 1997-2258523	
							1997
							0707
						<	
AU	9736204			A1	19980210	AU 1997-36204	
						110 122/ 00101	1997
							0707
						< 	3,3,
EP	912531			Δ1	19990506	EP 1997-932777	
				***	100000	BI 1997 932777	1997
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							0707
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ЬK	9710730			A	19990817	BR 1997-10730	
							1997
							0707
TD	20005151					<	
JP	200051514	1 1		T2	20001114	JP 1998-506485	
							1997
							0707
77.0	106600					<	
EP	1266889			A 2	20021218	EP 2002-20548	
							1997
							0707
						<	
EP	1266889			A3	20031203		
	R: BE,	DE,	ES,	FR,	GB, IT, NL		
ES	2192688			T3	20031016	ES 1997-932777	
							1997
	•						0707
						<	
TW	440564			В	20010616	TW 1997-86110045	
							1997
							0716
						<	
US	6369267			B1	20020409	US 2000-679231	
							2000
							1004
						<	2003
US	200209432	20		A 1	20020718	US 2001-6634	
-					20020710	00 2001 0054	2001
							1108
						<	1100
US	6653484			В2	20031125	\	
	0000404			DZ	20031125		

PRIORITY	APPLN.	INFO.	:
	* * * * * * * * * * * * * * * * * * * *	TIME O.	

CH	1996-1806	Α	
	•		1996
			0718
	<		
EP	1997-932777	A3	
			1997
			0707
	<		
WO	1997-EP3567	W	
			1997
			0707
	<		
US	1999-214859	B3	
			1999
			0113
	<		
US	2000-679231	A 3	
			2000
			1004

Ι

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OTHER SOURCE(S):

MARPAT 128:154827

Triazine, benzotriazole and benzophenone derivs. which are substituted or bridged with polyoxyalkylene groups, according to claim 1, and their use as UV absorbers, especially in photog. materials, in inks, including ink-jet inks and printing inks, in transfer prints, in paints and varnishes, organic polymeric materials, plastics, rubber, glass, packaging materials, in sunscreens of cosmetic prepns. and in skin protection compns. are disclosed. Diethylene glycol Me glycidyl ether was treated with 2,4-bis(2,4-dimethylphenyl)-6-(2,4-dihydroxyphenyl)-s-triazine to give I.

IT 202412-34-8P 202412-35-9P 202412-36-0P 202412-37-1P 202412-38-2P 202412-39-3P

202412-40-6P 202412-43-9P

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as **UV absorbers**)

RN 202412-34-8 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, oxybis[2,1-ethanediyloxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-CH_{2}-CH_{2}-O-CH_{2}-CH-CH_{2}-O-C-CH_{2}-CH_{2}-CH_{2}-CH_{2}-OH$$

RN 202412-35-9 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2,15-dihydroxy-4,17,10,13-tetraoxahexadecane-1,16-diyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-$$
 CH $_2-$ CH $_2-$ O- CH $_2-$ CH $_2-$ O- CH $_2-$ CH

PAGE 1-C

RN 202412-36-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[3-[3-[3-(2H-benzotriazol-2-yl)5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2hydroxypropyl]-ω-[3-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropoxy](9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$\begin{array}{c} \text{OH} & \text{O} \\ \text{CH}_2 - \text{O} \end{array} \begin{array}{c} \text{OH} & \text{O} \\ \text{I} \\ \text{OH} \end{array} \begin{array}{c} \text{OH} \\ \text{OH} \end{array} \begin{array}{c} \text{OH} \\ \text{OH} \end{array} \begin{array}{c} \text{OH} \\ \text{OH} \end{array}$$

RN 202412-37-1 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, oxybis[2,1-ethanediyloxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$- CH_2 - O - CH_2 - CH_2 - O - CH_2 - CH - CH_2 - O - C - CH_2 - CH_2$$

OH

OH

OH

OH

OH

OH

OH

PAGE 1-C

RN 202412-38-2 HCAPLUS

CN Benzenepropanoic acid, 3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2,18-dihydroxy-4,7,10,13,16-pentaoxanonadecane-1,19-diyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 1-C

$$-CH_2-CH_2$$
OH
 $C1$

RN 202412-39-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α-[3-[3-[3-[5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropyl]-ω-[3-[3-[3-(5-chloro-2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-2-hydroxypropoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

$$-O - \begin{bmatrix} CH_2 - CH_2 - O \end{bmatrix}_n CH_2 - CH - CH_2 - O - C - CH_2 - CH$$

PAGE 1-C

RN 202412-40-6 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[2-[3-(1,1-dimethylethyl)-4-hydroxy-5-(5-methyl-2H-benzotriazol-2-yl)phenoxy]ethoxy]-2-

USHA SHRESTHA EIC 1700 REM 4B28

oxoethyl] $-\omega$ - [2-[2-[3-(1,1-dimethylethyl) -4-hydroxy-5-(5-methyl-2H-benzotriazol-2-yl)phenoxy]ethoxy] -2-oxoethoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 202412-43-9 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[2-[4-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenoxy]butoxy]-2-oxoethyl]- ω -[2-[4-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenoxy]butoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

$$O = CH_2 - CH_$$

PAGE 1-B

IC ICM C07D251-24 ICS C08K005-34; C07D249-20; C07C049-84 CC 37-2 (Plastics Manufacture and Processing) Section cross-reference(s): 28, 38, 42, 63 light stabilizer polyoxyalkylene triazine; benzotriazole ST polyoxyalkylene light stabilizer; benzophenone polyoxyalkylene

light stabilizer; coating light stabilizer; polymer light stabilizer; plastic light stabilizer; rubber light stabilizer; glass UV absorber; packaging material light

stabilizer; cosmetic light stabilizer

IT Coating materials

> (light-resistant; polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as **uv** absorbers)

IT Cosmetics

Light stabilizers

Packaging materials

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT Polyurethanes, preparation

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT Polymers, uses

> (polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 83713-01-3, Jeffamine M-2070

> (Jeffamine M 600; polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as **uv** absorbers)

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IT
    929-59-9P
                202411-78-7P
                               202411-79-8P
                                              202411-80-1P
                   202411-82-3P
    202411-81-2P
                                  202411-83-4P
                                                 202411-84-5P
    202411-85-6P
                   202411-86-7P
                                  202411-87-8P
                                                 202411-88-9P
    202411-89-0P
                   202411-90-3P
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                                                 202411-92-5P
    202411-93-6P
                   202411-94-7P
                                  202411-95-8P
                                                 202411-97-0P
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                   202411-99-2P
                                  202412-00-8P
                                                 202412-01-9P
    202412-02-0P
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                                  202412-06-4P
                                                 202412-10-0P
    202412-11-1P
                   202412-12-2P
                                  202412-13-3P
                                                 202412-14-4P
    202412-15-5P
                   202412-16-6P
                                  202412-17-7P
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    202412-19-9P
                   202412-20-2P
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                                                 202412-22-4P
    202412-23-5P
                   202412-24-6P
                                  202412-25-7P
                                                 202412-26-8P
    202412-27-9P
                   202412-28-0P
                                                 202412-30-4P
                                  202412-29-1P
    202412-31-5P
                   202412-32-6P
                                  202412-33-7P 202412-34-8P
    202412-35-9P 202412-36-0P 202412-37-1P
    202412-38-2P 202412-39-3P 202412-40-6P
    202412-41-7P 202412-42-8P 202412-43-9P 202412-44-0P
    202412-45-1P
                   202412-48-4P 202412-49-5P
                                                 202412-50-8P
    202483-41-8P
                   202483-42-9P 202483-43-0P
                                                202533-62-8P
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202533-65-1P 202533-68-4P 202533-70-8P (polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as uv absorbers)

189751-54-0P IT

(polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

1954-28-5P, Triethylene glycol diglycidyl ether IT 4206-61-5P, Diethylene glycol diglycidyl ether 14435-45-1P 17626-93-6P, Tetraethylene glycol diglycidyl ether 26403-72-5P 26951-52-0P, Polytetramethylene glycol diglycidyl ether 28607-80-9P 40349-67-5P 35625-91-3P 50522-30-0P 71712-93-1P 73692-54-3P 87257-02-1P

> (polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 41556-26-7

> (polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

IT 106-89-8, reactions 111-77-3 111-90-0 112-35-6 112-50-5 131-56-6, 2,4-Dihydroxybenzophenone 143-22-6 1668-53-7 9004-77-7 9004-74-4 9046-10-0 22607-31-4 24979-97-3 38369-95-8 39927-08-7, Polyethylene glycol bis(carboxymethyl) 84268-33-7 84268-36-0 143451-01-8 200410-65-7 200410-81-7 202412-08-6 202412-46-2 202411-96-9 202412-47-3

> (polyoxyalkene substituted and bridged triazine, benzotriazole and benzophenone derivs. as UV absorbers)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 45 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

8

ACCESSION NUMBER:

1997:664091 HCAPLUS

DOCUMENT NUMBER:

127:347366

TITLE:

Laminated plastic films for green houses

INVENTOR(S): Tanaka, Yoshio; Mimura, Hisashi PATENT ASSIGNEE(S): Toray Industries, Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09262939	A2	19971007	JP 1996-72804	
				1996
				0327
			<	
PRIORITY APPLN. INFO.:			JP 1996-72804	
				1996
				0327

AB The laminate comprises a thermoplastic film having a surface hardening layer (pencil hardness H or harder) containing UVabsorbing substances and a hydrophobically treated layer (water contact angle ≤60°) on the other surface. The films show high weather resistance, transparency, scratch resistance, and anticlouding property. Lumirror T 90 (a PET film) was coated with a composition containing dipentaerythritol hexaacrylate 70, N-vinylpyrrolidone 30, 1-hydroxycyclohexyl Ph ketone 4, and 2-(2-hydroxy-5-methacryloxyethylphenyl)-2H-benzotriazole 35 parts, cured by UV irradiation, coated on the other side with a composition containing 25/10/15/45/5 (mol%) terephthalic acid-isophthalic acid-Na 5-sulfoisophthalate-ethylene glycol-diethylene glycol copolymer, and dried to give a laminate showing initial haze 3.1%, haze after a weathering test 3.8%, pencil hardness 3H, and water contact angle 48°.

(transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

RN 198084-21-8 HCAPLUS

198084-21-8P

2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone and 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

IT

CN

CRN 96478-09-0 CMF C18 H17 N3 O3

$$\begin{array}{c|c} & \text{OH} \\ & \text{N} \\ & \text{N} \\ & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{O}\text{--}\text{C}\text{--}\text{Me} \end{array}$$

CM 2

CRN 29570-58-9 CMF C28 H34 O13

CM 3

CRN 88-12-0 CMF C6 H9 N O

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CH=CH<sub>2</sub>
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IC ICM B32B027-00

ICS B32B027-18; B32B027-30; B32B027-36

CC 38-3 (Plastics Fabrication and Uses)

ST greenhouse laminated film polyester acrylic polymer; benzotriazole UV absorber laminated plastic greenhouse; weather resistance benzotriazole plastic film greenhouse; transparency laminated polyester polyacrylate film greenhouse; anticlouding laminated polyester polyacrylate film greenhouse; scratch resistance greenhouse laminated plastic film

IT Polyesters, properties

(Lumirror T 90; transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

IT Greenhouses

Laminated plastic films

Transparent films

UV stabilizers

(transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

IT Laminated plastics, properties

Polyesters, properties

(transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

IT 153175-43-0P 198084-21-8P

(transparent and anticlouding laminated plastic films containing benzotriazole-based **UV absorbers** for greenhouses)

L38 ANSWER 46 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:231596 HCAPLUS

DOCUMENT NUMBER: 124:291310

TITLE: Poly(phenylene ether) compositions

with improved light resistance

INVENTOR(S): Inoe, Kazunari

PATENT ASSIGNEE(S): GE Plastics Japan Ltd, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

<--

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08020718	A2	19960123	JP 1994-176204	
				1994
				0706
			<	
PRIORITY APPLN. INFO.:			JP 1994-176204	
				1994
				0706

GI

Title compns. comprise (A) 100 parts poly(phenylene ethers) optionally containing styrene resins and (B) 0.1-5 parts organosiloxanes having residues derived from UV absorbers. Thus, poly(2,6-dimethyl-1,4-phenylene) ether 40, Toporex 870ST (high-impact polystyrene) 60, a benzotriazole residue-containing cyclosiloxane I [obtained from 2-(2-hydroxy-5-methacryloyloxyethylphenyl)-2H-benzotriazole and 1,3,5,7-tetramethylcyclotetrasiloxane] 1, (PhO)3PO 10, and TiO2 5 parts were melt-kneaded, pelletized, and injection molded to give a test piece showing Izod impact strength 18 kg-cm/cm, heat distortion temperature 97°, ΔΕ 9.8 after 100-h accelerated weathering, and yellowness index 17 initially and 31 after the

weathering.

IT 175719-52-5P

(siloxanes having **UV absorber** residues for poly(phenylene ethers) with improved light resistance)

RN 175719-52-5 HCAPLUS

CN Cyclotetrasiloxane-2,4,6,8-tetraacetic acid, α,α,α',α',α'',α''',. alpha.''',2,4,6,8-dodecamethyl-, tetrakis[2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-B

$$-CH_2-CH_2$$

PAGE 3-A OH

IC ICM C08L071-12 ICS C08L071-12; C08K005-54; C08L025-04 ICI C08L071-12, C08L025-04, C08L083-05 37-6 (Plastics Manufacture and Processing) CC IT Plastics, molded (polyoxyphenylene-styrene polymer blends; siloxanes having UV absorber residues for poly(phenylene ethers) with improved light resistance) ITLight stabilizers (siloxanes having UV absorber residues for poly(phenylene ethers) with improved light resistance) IT Siloxanes and Silicones, preparation

(reaction products, with benzotriazole derivs.; siloxanes

USHA SHRESTHA EIC 1700 REM 4B28

```
having UV absorber residues for
        poly(phenylene ethers) with improved light resistance)
IT
     100-42-5D, Styrene, polymers 9003-53-6
        (high-impact, poly(phenylene ether) blends; siloxanes having
        UV absorber residues for poly(phenylene
        ethers) with improved light resistance)
ΙT
     106974-54-3, Toporex 870ST
        (poly(phenylene ether) blends; siloxanes having UV
        absorber residues for poly(phenylene ethers) with
        improved light resistance)
    2370-88-9
IT
        (precursor; siloxanes having UV absorber
       residues for poly(phenylene ethers) with improved light
IT
    96478-09-0
        (siloxane derivative precursor; siloxanes having UV
        absorber residues for poly(phenylene ethers) with
        improved light resistance)
     26403-67-8DP, reaction products with [hydroxy(methacryloyloxyethyl
IT
     )phenyl]benzotriazole 49718-23-2DP, Methylsilanediol
    homopolymer, trimethylsilyl-terminated, reaction products with
     {hydroxy(methacryloyloxyethyl)phenyl]benzotriazole
     reaction products with trimethylsilyl-terminated Me hydrogen
     siloxane 175719-52-5P
        (siloxanes having UV absorber residues for
        poly(phenylene ethers) with improved light resistance)
IT
    24938-67-8, Poly[(2,6-dimethyl-1,4-phenylene) ether]
                                                         25134-01-4,
     2,6-Xylenol homopolymer
        (siloxanes having UV absorber residues for
       poly(phenylene ethers) with improved light resistance)
L38 ANSWER 47 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                       1995:916479 HCAPLUS
DOCUMENT NUMBER:
                        123:317462
TITLE:
                        Stabilization of leather against thermal and
                        photochemical decomposition
INVENTOR(S):
                        Wyss, Franz; Arnold, Vladimir; Dbaly, Helena;
                        Leuschner, Gisbert; Rembold, Manfred;
                        Puentener, Alois
PATENT ASSIGNEE(S):
                        Ciba-Geigy A.-G., Switz.
SOURCE:
                        Eur. Pat. Appl., 34 pp.
                        CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                  KIND DATE APPLICATION NO.
                                                                 DATE
     -----
                  A2 19950802 EP 1995-810019
    EP 665294
                                                                  1995
                                                                  0110
                                              <---
                        B1 19990519
        R: AT, CH, DE, FR, GB, IT, LI, NL
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1995 0110

E 19990615 AT 1995-810019

AT 180283

ZA 9	9500386	A	19950719	ZA	1995-386		1995
							0118
					<		V
AU 9	510263	A1	19950803	AU	1995-10263		
							1995
							0118
					<		
		B2	19981029				
JP 0	7252500	A2	19951003	JP	1995-6204		
							1995
							0119
					<		
US 5	705083	A	19980106	US	1996-662735		1006
							1996
							0610
PRIORITY	ADDIN THEO			~ 11	1004 160	20	
PRIORITI	APPLN. INFO.:			CH	1994-160	A	1994
							0119
					<		UIIJ
				US	1995-371639	В1	
						~ -	1995
							0112
					<		

OTHER SOURCE(S): MARPAT 123:317462

AB Photochem. and thermal stabilizers for plastics, textile coatings, leather substitutes, and leather contain water-emulsifiable or -dispersible forms of com. sterically hindered amines, UV absorbers, and antioxidants, as well as water and other additives. Various compns. containing blends of these materials are described.

IT 84268-08-6

(photochem. and thermal stabilizers containing antioxidants and sterically hindered amines and UV absorbers for leather)

RN 84268-08-6 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,6-hexanediyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IC ICM C14C009-00

ICS C08K005-00; D06N003-00

CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

Section cross-reference(s): 38, 40

IT 2082-79-3 2440-22-4 3147-75-9 3147-76-0 3147-77-1 3846-71-7 3864-99-1 3896-11-5 10343-56-3 23328-53-2 43224-26-6 25305-63-9 25973-55-1 36437-37-3 41556-26-7

47916-12-1 52185-71-4, 1-Benzyl-4-hydroxy-2,2,6,6-

tetramethylpiperidine 52829-07-9 68039-62-3 70321-86-7

72066-88-7 79720-19-7 83044-89-7 83044-90-0 83044-91-1

83914-74-3 **84268-08-6** 84268-23-5 84268-33-7

98447-68-8 103597-45-1 104810-48-2 121859-42-5 131747-52-9 (photochem. and thermal stabilizers containing antioxidants and sterically hindered amines and UV absorbers for leather)

L38 ANSWER 48 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:360791 HCAPLUS

DOCUMENT NUMBER: 122:316096

TITLE: Acetal resin compositions with good

weather resistance

INVENTOR(S): Shimizu, Kenichi; U. Ken

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06322228	A2	19941122	JP 1993-110291	
				1993
				0512
ID 2214524	20	222122	<	
JP 3214524 PRIORITY APPLN. INFO.:	B2	20011002	TD 1002 110201	
INTOKITI APPEN. INFO.:			JP 1993-110291	1000
				1993
				0512

AB The title compns. comprise acetal resins, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) sebacate (I), and ≥1 UV absorber selected from bis(5-benzoyl-4-hydroxy-2-methoxyphenyl)methane (II), 2-(2-hydroxy-3-dodecyl-5-methylphenyl)benzotriazole, and 3-[3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionate-terminated polyethylene glycol. A composition contained Iupital (acetal resin) 100, I 0.10, II 1.50, melamine 0.20, and Ca stearate 0.05 part.

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IT 104810-47-1

(light stabilizers; acetal resin compns. containing)

RN 104810-47-1 HCAPLUS

PAGE 1-A

PAGE 1-B

IC ICM C08L059-00

ICS C08K005-17

CC 37-6 (Plastics Manufacture and Processing)

IT Light stabilizers

(in acetal resin compns. for weather resistance)

IT 23328-53-2 41556-26-7 68716-15-4 104810-47-1

(light stabilizers; acetal resin compns. containing)

L38 ANSWER 49 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1995:276828 HCAPLUS

DOCUMENT NUMBER: 122:57463

TITLE: Non-blooming UV-light stabilizers

for polycarbonate resin compositions

INVENTOR(S): Umemura, Toshikazu; Kanayama, Satoshi; Takada,

Toshiaki; Ogawa, Noryoshi

PATENT ASSIGNEE(S): Mitsubishi Gas Chemical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06145491	A2	19940524	JP 1992-294601	1992
JP 3211843	B2	20010925		1102

PRIORITY APPLN. INFO.:

JP 1992-294601

1992 1102

The title compns. contain main polycarbonate resins, polycarbonates bearing benzotriazolyl UV-absorbing groups as light stabilizers, and phosphate-type and/or hindered phenol-type antioxidants. Thus, phosgenation of a mixture of bisphenol A and bis(3-(2H-benzotriazol-2-yl)-2-hydroxy-5-octylphenyl)methane gave a UV-absorbing polycarbonate 0.5 part of which was blended with 100 parts Iupilon S-3000 (a polycarbonate) and 0.1 part a hindered phenol then injection molded to give test pieces with good resistance to discolorization in a Sunshine weatherometer test.

IT 159043-45-5D, reaction products with monophenols (UV light-absorbing; non-blooming UV-light stabilizers for polycarbonate resin compns.)

RN 159043-45-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,6-hexanediyl ester, polymer with carbonic dichloride and 4,4'-(1-methylethylidene)bis[phenol] (9CI) (CA INDEX NAME)

CM 1

CRN 84268-08-6 CMF C44 H52 N6 O6

PAGE 1-A

PAGE 1-B

CM 2

CRN 80-05-7 CMF C15 H16 O2

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Me
           Me
     CM
          3
     CRN
         75-44-5
     CMF
          C Cl2 O
C1-C-C1
IC
     ICM C08L069-00
     ICS C08K005-13; C08K005-52
CC
     37-6 (Plastics Manufacture and Processing)
IT
     Antioxidants
        (non-blooming UV-light stabilizers for polycarbonate
        resin compns.)
IT
     Polycarbonates, uses
        (non-blooming UV-light stabilizers for resin compns.)
IT
     Light stabilizers
        (UV, non-blooming stabilizers for polycarbonate resin
        compns.)
IT
     Phenols, uses
        (hindered, non-blooming UV-light stabilizers for
        polycarbonate resin compns.)
IT
     24124-16-1D, reaction products with polycarbonates
     159043-45-5D, reaction products with monophenols
     159655-37-5D, reaction products with monophenols
        (UV light-absorbing; non-blooming UV-light
        stabilizers for polycarbonate resin compns.)
     6683-19-8, Pentaerythrityl tetrakis(3-(3,5-di-tert-butyl-4-
IT
     hydroxyphenyl)propionate)
                                 26741-53-7, Bis(2,4-di-tert-
     butylphenyl)pentaerythritol diphosphite 31570-04-4,
     Tris(2,4-di-tert-butylphenyl)phosphite
                                              38613-77-3
                                                            90498-90-1
        (antioxidants; non-blooming UV-light stabilizers for
        polycarbonate resin compns.)
IT
     98-54-4D, p-tert-Butylphenol, reaction products with
     polycarbonates
        (non-blooming UV-light stabilizers for polycarbonate
        resin compns.)
IT
     24936-68-3, Iupilon S-3000, uses
        (non-blooming UV-light stabilizers for polycarbonate
        resin compns.)
    ANSWER 50 OF 57
L38
                      HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         1993:103729 HCAPLUS
DOCUMENT NUMBER:
                         118:103729
TITLE:
                         5-Sulfonyl-substituted benzotriazole
                         UV absorbers and stabilized
                         compositions
INVENTOR(S):
                         Winter, Roland A. E.; Von Ahn, Volker H.;
```

Stevenson, Tyler A.; Holt, Mark S.;

Ravichandran, Ramanathan Ciba-Geigy A.-G., Switz. PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT ASSIGNEE(S):

SOURCE:

	PA	rent n	10 .			KIN	D -	DATE			API	PLICATION	NO.		DATE
	WO	92147	- 717			A1		19920	903		WO	1992-US10	81		1992 0211
		T.1	<i>~</i>	70	***							<			
				JP, BE.		-		ES.	FR.	GB.	. GF	R, IT, LU,	MC.	NL.	SE
	US											1992-8282		,	-
															1992
												<			0205
	EP	572 5 5	54			A1		19931	208		ΕP	1992-9077	25		
															1992
															0211
	ΕP	57255	54			В1		20000	510			<			
		R:	BE,	DE,	ES,	FR,		IT,		SE					
	JP	06505	5743			T2		19940	630		JP	1992-5072	80		
															1992 0211
												<			V211
		31801				B2									
	RU	21272	264			C1		19990	310		RU	1993-5056	57		1000
															1992 0211
												<			0211
	CA	20989	99			C		20021	.119		CA	1992-2098	999		
															1992
												<			0211
PRIOR	RIT!	Y APPI	.N.	INFO.	. :						US	1991-6541	.55	A	
															1991
												<			0212
											US	1992-8282	91	A	.2
															1992
															0205
											พด	< 1992-US10	81	W	•
												1772 0010	Ų I	**	1992
															0211
												_			

OTHER SOURCE(S): MARPAT 118:103729

AB 2-(2-Hydroxyphenyl)-2H-benzotriazole UV
absorbers substituted at the 5-position of the benzo ring
by a -SO- or -SO2- group are prepared, show enhanced absorption in
the near visible range (>350 nm), and are especially effective at 0.01-5
wt% in protecting polymers against radiation >350 nm. Thus, to an

< - -

epoxy-primed steel panel was applied an acrylic melamine clearcoat containing 3 wt% 5-benzenesulfonyl-2-[2-hydroxy-3-tert-butyl-5-(β -octoxycarbonylethyl)phenyl]-2H-benzotriazole; baking 30 min. at 121°, storing 1 wk, and exposing in Florida in a black box showed 127 days before delamination.

IT 145233-64-3P

(preparation and oxidation of)

RN 145233-64-3 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylthio)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

IT 146124-29-0P 146124-30-3P

(preparation of, as UV stabilizers)

RN 146124-29-0 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]benzenepropanoate (9CI) (CA INDEX NAME)

CM 1

CRN 146124-28-9 CMF C32 H35 N3 O8 S

CM 2

CRN 146124-27-8 CMF C32 H35 N3 O8 S

RN 146124-30-3 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]-, 1-(hydroxymethyl)-2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene, 2-hydroxyethyl 2-propenoate, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl 3-(1,1-dimethylethyl)-4-hydroxy-5-[5-(phenylsulfonyl)-2H-benzotriazol-2-yl]benzenepropanoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 146124-28-9 CMF C32 H35 N3 O8 S

CM 2

CRN 146124-27-8 CMF C32 H35 N3 O8 S

CM 3

CRN 818-61-1 CMF C5 H8 O3

$$0$$
 $||$
 $HO-CH_2-CH_2-O-C-CH=CH_2$

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 100-42-5 CMF C8 H8

$$H_2C = CH - Ph$$

CM 6

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-} & \text{C-} & \text{C-} & \text{Me} \end{array}$$

CM 7

CRN 79-10-7 CMF C3 H4 O2

- IC ICM C07D249-20
 - ICS C07F009-6518; C07F007-18; C08G065-32; C08F220-38; C08K005-3475
- CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 28, 42
- ST hydroxyphenylbenzotriazole **UV** absorber coating; stabilizer light benzotriazole plastic
- IT Epoxy resins, miscellaneous

(UV absorbers for, sulfonyl-containing benzotriazoles as)

IT Coating materials

(primers, topcoats for, containing sulfonyl-containing benzotriazoles as UV absorbers)

IT Coating materials

(transparent, UV absorbers for,

sulfonyl-containing benzotriazoles as)

IT 145233-53-0P 145233-57-4P 145233-59-6P 145233-61-0P

145233-63-2P 145233-64-3P

(preparation and oxidation of)

IT 145233-54-1P 145233-55-2P 145233-56-3P 145233-58-5P 145233-60-9P 145233-62-1P 145233-65-4P 145233-66-5P

146124-29-0P 146124-30-3P

(preparation of, as UV stabilizers)

L38 ANSWER 51 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1990:534292 HCAPLUS

DOCUMENT NUMBER:

113:134292

TITLE:

UV-stabilized melamine-polyol coatings for

thermoplastic substrates

INVENTOR (S):

Moore, James E.; Factor, Arnold; Miranda,

Peter M.

PATENT ASSIGNEE(S):

General Electric Co., USA

SOURCE:

U.S., 4 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	API	PLICATION NO.	DATE
US 491	 .3974	A	19900403	US	1987-140109	
						1987
						1231
					<	
EP 386	298	A1	19900912	EP	1989-104234	
						1989
						0310
					<	
	DE, FR, GB,	-				
JP 022	48469	A2	19901004	JP	1989-58036	
						1989
						0313
DD T 4 D T					<	
PRIORITY AP	PLN. INFO.:			US	1987-140109	
						1987
						1231
СТ					<	

AB UV-resistant coatings, useful for protecting thermoplastic resins, especially polycarbonates against UV degradation, comprise (A) 20-80% melamine compound [I; R = H, CH2OH, CH2O(CH2)xH; x = 1-4]; (B) 80-20% polyol; and (C) UV absorber II (R1 = H, halogen, C1-6-alkyl, or a C1-6-alkoxy; R2 = H, halogen, C1-6-alkyl, or a C6-10 arylsulfonyl; n = 1-4, m = 3; and R3 = trivalent hydrocarbyl or C2-22-alkyl ether). Thus, a blend of 90 parts Cymel 301 and 180 parts LS 73 (an acrylic polyol) was catalyzed with 3.75 parts of 40% p-toluenesulfonic acid solution in iso-PrOH premixed with 0.8 part Et3N was diluted with 330 parts of a 4:1 mixture of 2-butoxyethanol and propylene glycol Me ether. The blend was then mixed with 10 parts of an 90% solution of 3-(3-tert-butyl-4hydroxybenzotriazole-2-yl)propionic acid triethylene glycol diester in PhMe to form a coating composition Lexan polycarbonate panels were coated with the composition and cured at 125° for 2 h showing retained UV absorbents 97%, and 95.9% after addnl. 48 h at 125°, compared with 24 and 11.1, resp., for a similar composition containing Tinuvin P instead of III.

IT 125370-29-8

(UV absorbers, coatings containing, for thermoplastics)

RN 125370-29-8 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IC ICM B32B027-36 ICS C08G012-32

INCL 428480000

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

IT 125370-29-8

(UV absorbers, coatings containing, for thermoplastics)

IT 24936-68-3, Lexan, uses and miscellaneous

(coatings for, UV-stabilized melamine-polyol compns.

as, light-resistant)

L38 ANSWER 52 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:498410 HCAPLUS

DOCUMENT NUMBER:

111:98410

TITLE:

Stabilizer mixtures for polyarethanes

INVENTOR(S):

Neumann, Peter; Aumueller, Alexander; Trauth,

< - -

Hubert; Matzke, Guenter

PATENT ASSIGNEE(S):

BASF A.-G., Fed. Rep. Ger.

SOURCE:

Ger. Offen., 6 pp. CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3725926	Al	19890216	DE 1987-3725926	
				1987
				0805
			<	
PRIORITY APPLN. INFO.:			DE 1987-3725926	
				1987
				0805

OTHER SOURCE(S):

MARPAT 111:98410

GI

The title compns. contain the hindered amines I (R1, R2 = H, Me, Ph) and UV absorbers and/or antioxidants (hindered phenols, phosphites, and/or Vitamin E or derivs.). A polyoxyalkylene-polyurethane containing I (R1, R2 = H) 0.5,

Ι

3-[3-benzotriazol-2-yl-5-tert-butyl-4-hydroxyphenyl]propionic acid polyethylene glycol ester 0.5, and 1:10 α -tocophenoltris(nonylphenyl) phosphite mixture 0.25% had yellowness index 4.4 and 14.7 after O and 48 h, resp., of Xenotesting; vs. 4.8 and 19.7, resp., with a conventional benzotriazole-hindered phenol-hindered amine stabilizer.

IT 104810-47-1

(light stabilizers containing, nondiscoloring, for polyurethanes)

RN 104810-47-1 HCAPLUS CN

Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1oxopropoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A

$$CH_2$$
 CH_2 CH_2

PAGE 1-B

IC ICM C08L075-04

ICS C08K005-00

ICA C08G018-00; C09K015-08; C09K015-30; C09K015-32

ICI C07D487-22, C07D251-00, C07D235-00; C08K005-00, C08K005-34, C08K005-13, C08K005-52, C08K005-15; C08J003-20, C08L075-04, C08K005-00; C08J007-00, C08L075-04, C08K005-00

CC 37-6 (Plastics Manufacture and Processing)

ITUrethane polymers, uses and miscellaneous

(polyoxyalkylene-, light stabilizers and antioxidants for, nondiscoloring compns. as)

Discoloration prevention IT

> (yellowing, antioxidant-light stabilizer compns. for, for polyurethanes)

IT104810-47-1 104810-48-2 109423-00-9

(light stabilizers containing, nondiscoloring, for polyurethanes)

L38 ANSWER 53 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1989:194760 HCAPLUS

DOCUMENT NUMBER: 110:194760

TITLE: Benzotriazole light stabilizers for

thermosetting resin coatings

INVENTOR(S): Yagi, Masaki; Nakahara, Yutaka; Takatori,

Katsuyuki; Nakajima, Toshio

PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan

<--

SOURCE:

Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63205334	A2	19880824	JP 1987-36935	
				1987
				0220
			<	
PRIORITY APPLN. INFO.:			JP 1987-36935	
				1987
				0220

$$\begin{array}{c|c}
N & OH \\
N & N
\end{array}$$

$$XCOCR^1 = CH_2$$

Title stabilizers are composed of benzotriazoles I [R = H, alkyl; AB R1 = H, Me; X = O, CH2NH, OCH2CH2O, OCH2CH(OH)CH2O, CH2O, CH2CH2O, CH2CH2CO2CH2CH2O, CH2CH2CO2CH2CH(OH)CH2O]. A primed steel plate was sprayed with a base coating composition containing Bu acrylate (II)-2-hydroxyethyl methacrylate (III)-methacrylic acid (IV)-Me methacrylate (V) copolymer, U-Van 20SE60, cellulose acetate butyrate, Alpaste 1123N, xylene, AcOBu, and Cu phthalocyanine blue, left for 10 min, sprayed with a top coating composition containing II-III-IV-V-[2-hydroxy-3-(acryloylaminomethyl)-5-methylphenyl]benzotriazole (VI) copolymer, U-Van 20SE60, xylene, and Bu glycol acetate, and baked 30 min at 140° to form a coating, which cracked after 2500 h in weather-o-meter test, vs., 1600 for the coating prepared without VI. IT 120303-69-7

I

(crosslinking agents, with melamine resins, for coconut oil-modified alkyd resin coatings, weather-resistant)

RN 120303-69-7 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

IC ICM C08K005-34 ICS C08K005-34

CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 37

IT 3234-16-0 3234-22-8 20952-85-6 24802-38-8 25177-21-3

47658-69-5 107479-06-1 120284-05-1 120284-06-2

120303-69-7 120326-78-5

(crosslinking agents, with melamine resins, for coconut oil-modified alkyd resin coatings, weather-resistant)

L38 ANSWER 54 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:40188 HCAPLUS

DOCUMENT NUMBER:

110:40188

TITLE:

Ultraviolet-absorbing polyamide or polyester

material compositions with improved

durability

INVENTOR(S):

Ozawa, Akihiro

PATENT ASSIGNEE(S):

Morisawa and Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Tananece

FAMILY ACC. NUM. COUNT:

Japanese

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63172729	A2	19880716	JP 1987-2762	
				1987
				0109
			<	
PRIORITY APPLN. INFO.:			JP 1987-2762	
				1987
				0109
			<	

GI

AB Title compns. having repeating units I [R1 = residue of divalent alc. or amine; R2 = (ar)alkyl; R3 = H, halo, alkyl; X1-2 = 0, NR4; R4 = H, alkyl, aryl; Y = CH2CH2, Z1-2] are prepared Thus, 2-(2-hydroxy-3-allyl-5-methylphenyl)benzotriazole and di(hydroxyethyl) maleate were reacted and hydrogenated and 10 g of the product was polymerized with 90 g bis(β-hydroxyethyl) terephthalate in the presence of Sb2O3 in vacuo at 290° and cut to give a chipped copolymer with average mol. weight ≥5000 and softening point 190-200°, which was pressed to give 2 0.1-mm films. A red cellophane membrane was sandwiched between the films then UV-irradiated at 80° for 300 h to show 8% color degradation, vs. 60 for the membrane treated similarly using PET films instead.

IT 118240-34-9P 118240-35-0P

(UV absorbers, preparation of, with improved durability)

RN 118240-34-9 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, bis(2-hydroxyethyl) ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 118240-33-8 CMF C24 H29 N3 O7

RN 118240-35-0 HCAPLUS

CN 1,4-Benzenedicarboxylic acid, bis(2-hydroxyethyl) ester, polymer with bis(2-hydroxyethyl) [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 118240-33-8

CMF C24 H29 N3 O7

CM 2

CRN 959-26-2 CMF C12 H14 O6

$$O \\ C - O - CH_2 - CH_2 - OH$$
 $O \\ C - O - CH_2 - CH_2 - OH$

IC ICM C08G063-68

ICS C08G063-68; C08G069-26; C08L101-00

CC 38-3 (Plastics Fabrication and Uses)

ST polyester film UV absorber durability;

polyamide film **UV** absorber durability;

allylphenylbenzotriazole hydroxyethyl maleate adduct copolymer;

hydroxyethyl terephthalate copolymer UV absorber

IT Polyamides, preparation

Polyesters, preparation

(UV absorbers, preparation of, with improved durability)

IT 118240-34-9P 118240-35-0P 118240-37-2P

118240-38-3P

(UV absorbers, preparation of, with improved durability)

IT 9002-88-4, Polyethylene

(films, containing polyester or polyamide **uv**-absorbers, with improved durability)

L38 ANSWER 55 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:550743 HCAPLUS

DOCUMENT NUMBER: 109:150743

TITLE: Light stabilizers for polymer

compositions Ozawa, Akihiro

INVENTOR(S):
PATENT ASSIGNEE(S):

SOURCE:

Morisawa and Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63099247	A2	19880430	JP 1986-246330	
				1986
				1016
			<	
PRIORITY APPLN. INFO.:			JP 1986-246330	
				1986
				1016

Polymers containing or reacted with 2-[2-hydroxy-3-hydrocarbyl-5-a(ra)lkylphenyl]benzotriazole derivs. have good light resistance. Solvesso 150 solution containing 265 g 2-(2-hydroxy-3-allyl-5-methylphenyl)benzotriazole and 147 g maleic anhydride was refluxed 40 h at 190° to give a maleated compound, and reacted (36.3 g) 6 h at 120° with 12 g cyclohexanol in Solvesso 150 to give a stabilizer, which (0.3 part) was mixed with PVC 100, DOP 48, and additives 3.6 part and molded to give a 1-mm film having light resistance 520 h, vs. 310 for a film without the stabilizer. IT 116925-89-4 116925-90-7 116925-91-8

(light stabilizers, for plastics)

RN 116925-89-4 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, bis(3-methoxybutyl) ester (9CI) (CA INDEX NAME)

RN 116925-90-7 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]propyl]-, 4-cyclohexyl 1-propyl ester (9CI) (CA INDEX NAME)

RN 116925-91-8 HCAPLUS

CN Butanedioic acid, [3-[3-(2H-benzotriazol-2-yl)-2-hydroxy-5-methylphenyl]-, bis(2-hydroxypropyl) ester (9CI) (CA INDEX

NAME)

IC ICM C08K005-34

ICS C08K005-34; C08L023-12; C08L027-06; C09D005-38

CC 37-6 (**Plastics** Manufacture and Processing)

Section cross-reference(s): 42

IT116737-22-5 116737-23-6 116853-50-0 116853-51-1

116853-52-2 116925-89-4 116925-90-7

116925-91-8 116925-92-9

(light stabilizers, for plastics)

L38 ANSWER 56 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1988:438814 HCAPLUS

DOCUMENT NUMBER: 109:38814

TITLE: Stabilization of polyurethane systems against

photooxidative influences

AUTHOR(S): Stohler, Felix R.; Berger, Kurt

CORPORATE SOURCE: CIBA-GEIGY Ltd., Basel, CH-4002, Switz.

SOURCE: Angewandte Makromolekulare Chemie (1988),

158-159, 233-46

CODEN: ANMCBO; ISSN: 0003-3146

DOCUMENT TYPE: Journal LANGUAGE: German

AB The stabilization of polyurethane coatings and foams and thermoplastics by hindered amine light stabilizers, UV absorbers, phenolic antioxidants, and phosphonites was studied. The

piperidine derivative light stabilizers had the greatest effect.

IT104810-47-1

(light stabilizers, for polyurethanes)

RN104810-47-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1oxopropoxy] - (9CI) (CA INDEX NAME)

PAGE 1-A

$$CH_2-CH_2-C$$
 $CH_2-CH_2-CH_2$
 $CH_2-CH_2-CH_2$

PAGE 1-B

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

IT Shoes

(soles, polyurethane compns. for, light stabilization of, systems for)

IT 6683-19-8 36443-68-2 68407-88-5

(light stabilizer compns. containing, for polyurethanes)

IT 2440-22-4, 2-(2-Hydroxy-5-methylphenyl)benzotriazole 25973-55-1 41556-26-7, Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate

52829-07-9 **104810-47-1** 104810-48-2 115111-09-6

115235-92-2D, esters

(light stabilizers, for polyurethanes)

L38 ANSWER 57 OF 57 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:492151 HCAPLUS

DOCUMENT NUMBER: 101:92151

TITLE: Stabilized synthetic resin

compositions

PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 59043061	A2	19840309	JP 1982-154850	
				1982
			<	0906
JP 02018346	B4	19900425	•	
PRIORITY APPLN. INFO.:			JP 1982-154850	
				1982
				0906

GI

< - -

AB Compds. having 2,2,6,6-tetramethylpiperidyl groups and 2-hydroxybenzophenone-4-yl groups (0.001-10 parts) are added to 100 parts synthetic resins to improve light resistance. sheet prepared from polypropylene [9003-07-0] 100, stearyl β -3,5-di-tert-butyl-4-hydroxyphenylpropionate 0.2, and I [91499-45-5] 0.3 part had light resistance 720 h, compared with 450 h for a sheet containing 0.15 part 2-hydroxy-4-methoxybenzophenone and 0.15 part di-Me succinate-1-(2-hydroxyethyl)-2,2,6,6tetramethyl-4-hydroxypiperidine condensate as the light stabilizers.

Ι

IT 91454-00-1 91454-02-3 91454-03-4 91454-04-5

(light stabilizers, for polymers)

RN

CN

91454-00-1 HCAPLUS Butanedioic acid, 1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[1-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-2,2,6,6-tetramethyl-4-piperidinyl]oxy]-1,4-dioxobutoxy]propyl]-2,2,6,6-tetramethyl-4-piperidinyl]oxy]-1,4-dioxobutoxy]propyl]-2,2,6,6-tetramethyl-4-piperidinyl 2-[4-(2H-benzotriazol-2-yl)-3hydroxyphenoxy] -1 - [[4 - (4 - methoxy - 1, 4 - dioxobutoxy) - 2, 2, 6, 6 - methoxy - 1, 4 - dioxobutoxy]]tetramethyl-1-piperidinyl]methyl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

$$\begin{array}{c} C \longrightarrow O \\ CH_2 \\ C \longrightarrow O \\ C \longrightarrow O \\ CH \longrightarrow CH_2 \\ C \longrightarrow O \\ CH_2 \\ Me \longrightarrow Me \\ Me \longrightarrow Me \\ Me \longrightarrow Me \\ OH \end{array}$$

PAGE 3-A

Me-

PAGE 3-B

PAGE 4-B

0

RN 91454-02-3 HCAPLUS

CN Butanedioic acid, [9-[3-[4-(2H-benzotriazol-2-yl)-3-

USHA SHRESTHA EIC 1700 REM 4B28

hydroxyphenoxy] -2-[4-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[4-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methoxy]-1,4-dioxobutoxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methoxy]-1,4-dioxobutoxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methyl 2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-[[4-[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-ethyl-3-[(4-methoxy-1,4-dioxobutoxy)methyl]-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yl]methyl]ethoxy]-1,4-dioxobutoxy]methyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yl]methyl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

USHA SHRESTHA EIC 1700 REM 4B28

PAGE 1-E

RN 91454-03-4 HCAPLUS

CN Hexanedioic acid, bis[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-[[6-[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-3-yl]methoxy]-1,6-dioxohexyl]oxy]methyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-9-yl]methyl]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

OH Me Me
$$CH_2 - O - CH_2 - CH - CH_2 - N$$

NOH Me Me $CH_2 - O - C$

PAGE 1-B

HO

HO

HO

HO

$$CH_2$$
 CH_2
 CH_2

PAGE 1-C

PAGE 1-D

91454-04-5 HCAPLUS RN Carbonic acid, [9-{3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy}-2-CN[[[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-[[[[9-[3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5] undec-3yl]methoxy]carbonyl]oxy]propyl]-3-ethyl-8,8,10,10-tetramethyl-1,5dioxa-9-azaspiro[5.5]undec-3-yl]methoxy]carbonyl]oxy]propyl]-3ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-3yl]methyl 2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-[[[[2-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-1-[[3-ethyl-8,8,10,10-tetramethyl-3-[[(phenoxycarbonyl)oxy]methyl]-1,5-dioxa-9azaspiro[5.5]undec-9-yl]methyl]ethoxy]carbonyl]oxy]methyl]-3-ethyl-8,8,10,10-tetramethyl-1,5-dioxa-9-azaspiro[5.5]undec-9yl]methyl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

HO-

USHA SHRESTHA EIC 1700 REM 4B28

PAGE 1-D

IC C08L101-00; C08K005-34 CC 37-6 (Plastics Manufacture and Processing) IT 91453-94-0 91453-95-1 91453-96-2 91453-97-3 91453-98-4 91453-99-5 91454-00-1 91454-01-2 91454-02-3 91454-03-4 91454-04-5 91454-05-6 91454-09-0 91454-11-4 91454-14-7 91454-10-3 91454-12-5 91454-13-6 91459-92-6 91499-45-5 91700-70-8 (light stabilizers, for polymers)



Creation date: 09-19-2006

Indexing Officer: ANKIPIGI - ALLISON NKPIGI

Team: ZZZFEP Dossier: 10325465

Legal Date: 09-19-2006

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Remarks:
Order of re-scan issued on